

<400> 8288

```
gtcattgccc aaagctgatt ctcttgcttt ttatttcttg aatggcataa gccacgtcaa 60
agggctaaaa atgcatttca agccccagct gaaaaccaac tggagagggt gaggcaaaga 120
gagaaaagga gagaacacaa acttgttgct gggagtagag gctgccacct gctccctatg 180
gacatttgca aatgctgggtg aatgactgga ccctccagga atagtgccct gaccttagcc 240
ccaaaatgta tccaagtgga gaacatgcag agcccactgt cccaggagaa ctccccctcc 300
caaagggtga cagaacacga agtagactgt atatgaaggc aatggacagg gcagatggag 360
tgttagcatc actctcttta ggcacttggtg taaggaatgt aggctctcca gtgagctgcc 420
tncnccaga gccctccatt ctggtcttca actgggcttg tgcctatagg gcaccccatg 480
ctgtaaccng canggaaaaa gtaaaggggg agnttcttaa caancctgag gcttnttcaa 540
aangaaggtt gg 552
```

<210> 8289

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8289

```
aatatttgct attttcttta atgccttagt tctggagaaa ggctaaaatc tcatcatatt 60
gacattaaca catttttaaa aagtgtctct caagtgtaat atttaataaa actaggtact 120
gaaaaatggt ctgaaatttt tcaagtcaat gttgttttca agtatattaa aatgctcaga 180
agaaaaaatt ctccatggtt ataattctga tcaatctata aatgtacttt ttaaaagaga 240
gttccaacag aggtggataa taggtaagtt cctcagacac aggcatacag tctttttgaa 300
gaaatagaat gccttgttac cacaacctgg ttgatttttt ttttttaaac actgatttca 360
ggcacaatgg ctgaatccac ttctgggtca tctttctcct cctcttggtt gggtttacaag 420
agtagtgaat acttcagtta tggacagaaa gaaagacaca aactctgaaa cggagacttc 480
acttttcact acaaaggaat caaagtcact gagttctcat tggttgggggt ggaatctgct 540
gnccctgtgc caaaaatag 559
```

<210> 8290

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8290

```

gcaatttatg cattttattg tatatatattt ataactcaat gaaaatgtta tatcatatat   60
tacatgtaat tatatgtgca tataattata tacacataca acatatatat acacacatac  120
acacacacac atacaccctt atatatgatt atggcagcct tctacttctc caacgcattc  180
ttttttttgt ttttttgaga cagagtctct gtgtgttgcc caggcttcaa tgcaatggca  240
tgatctcagc tcaactgcaac ttttgcctcc tgggttcaag tgattctccc gcctcagccc  300
cccaagtagc tgggagattg aggccgcggt gagctgattg tgccactgca ctccagcctg  360
ggatagagcg agaccttgtc tctaataaat acacaagcaa aatccaaagt tcgctttgga  420
ttgctagccc atcaaaaagg ctagctcctt gaagggtgga atttttgcca ctttagttcc  480
ctgctgcatg cccagcaact ggaacaagtg ctttgcacat agtangtgct cagtaaagt  540
gaaggatgaa tgaanac                                     557
    
```

<210> 8291

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8291

```

gcaaagaagg aatgaaggga ttattgaaa atgaaagtac actccacagt gtgggggtga   60
gcctgagcat aggagcacia aagccctgtt acagaacttc tgagagttta aataccctct  120
aggtgattcc atttggttact tggggcacac gttatgtaga tggagagcct gttacagaac  180
ttctgagagt ttaaacaccc tctagtgat tccattgggt acttggggca cacgttatgc  240
agatggagag gatgaagtta caaagtcatt tgcttggcct atgtcctatg gagaaggat  300
    
```


ttcctatcat aactgaagtg tgaatcagcc tatgttccct gcactcagac cctattttcc 360
 tgcctcctac ctacagctgt gtggtcctga gctgtcacct cttccctttg aagctcaggt 420
 tcctcatcgg taaaatgagg cagaaatact cactgctgan atgtgtgagg atcgcacaaa 480
 ctcagtgtct caacatgttg tacntgtgtt tgggccctct gagcccttga ggcttgcccc 540
 aggtggaac 549

<210> 8292

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8292

ggaaggggag gtcataaatg ttgaatctgg caaatcataa atttcttgtc ttaacattgc 60
 cgcatttact atcatctcat ttgaaagctg atgtgtttgg gctgggtgat ggcagagggg 120
 tgggagttgg gggatgctgg ctctgaaatg ccagagaggc attaagaact ctggaagcat 180
 ctggctactg gtagacattt tacacagata gcaatttctg accaatccat ttcaatgatt 240
 tctaaccat actcaactat ccagaggata ctgttttaag aacattattg taaactgata 300
 ctctctattc atttacaaaa ttcatlcatt gcatactttt tgtttaatag cttggattca 360
 gtgttacaga tttgattgac ccaagtgaag aaatactgac actaatcatt ttttaagtgt 420
 atttcagaag aatatgcgca atgtttctaa gttattgtga ctttgtgact gtcgtagctt 480
 taaattataa tactaatatc ctactctgag aaatgtgtaa gacacaggtc taacaaacaa 540
 ctacattaac ctgc 554

<210> 8293

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8293

gntttccata tgacactttc attccccata cttttctgtg aagaaagacg cagaggtagc 60
 aaagacaaga gacaagtaga ttgcaaaaag aaatgttttt gtagaaaagg gaaaaactct 120
 atgggagatg aaataaaatg agcaagttct gaggggtgat ggacagatca aaaacagatg 180
 atcttcaaga caacataatc acccataaac gtggtaaaac aaaaaattac acttccaatt 240
 tgggtgaaaag agtgccacct gctgacactt tctggaataa ggtagtttag cccatttgaa 300
 agaagctgta ttgccttctc aaaaacaacg aaaacctact attgatcaat gaaggtaaca 360
 agatataact tcaacaaagt aaaacaacga acacataatt atcccacaaa ataagaattt 420
 aaataaagaa ttatcaaacc tggaattcta ctctgtcaa ttattgnttc tggcatatgg 480
 taggggttca aaatacattt gttggagcga attctaacat agtactattt agttttctga 540
 aaatcctgna atgn 554

<210> 8294

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8294

cttttgcaat ttcttctagt ccttcaccac tctccatgcc ttctacaaaa atccccccac 60
 attggggaag aatccagtag cggcgtctgt aacgatcttg gccaaacatc actgaacgca 120
 atgagtgaga cgcatcaaag agcttccttc tgtactgact ctgttggtta ctgagttttt 180
 caatctgttt ttccagctct tcaacacttg ctgcttggtc accttcattc tcattctcac 240
 agatatcagt cttttttcct tttttgtctt ctttatcttc ttcatcctca tcattctcat 300
 ccccttggtc atcactgtca tcgtcatcat catcgtcata atcactgtct cctcccttcc 360
 ttcttcgctt gcgtcctgga gtgggtgtgc ccaagggatg ttgctcttct cccagatcaa 420
 tgccacctga agtgtctctt ttgcctgttt tcttagcatg aatgattctg agcttgcgga 480
 gtttaccttc taccacccat ttatctctcc tcaagttgac atataatcaa ngctttgncg 540
 attcactgac cn 552

<210> 8295

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8295

```

gttattcctt ttattataat gttttaaact tggcttaaag ttcaaaatac tatttccaga   60
taactttcca ctgttacatc aactaggcaa ctttgttatg tttatgttat atgtatcagt  120
tacttatcag cacagaatth taaccactct gctaaattht gagaaaacag ctaaactcaa  180
tataaaattht ggcctacaga attatagtgg ctatthgtta ctaaaaatat tccaaaagaa  240
atttacttat tttactatat tccatattct ttaacttaaa atctgctgcc actgtthtagt  300
aaaagtggga caaataaaat tctthaaat atagaaaata cagttcctgt taagatthtg  360
caaacaaaaa attaataaat aatacaatth gagtactcta aaacaatata ctttgtagtc  420
tagattgtgg tthtggtcag tatgtctgac actatgaaga tttacatcag ttcagggaat  480
gagttctaath ctattaataa atagtcaata taaccaaaca cctgacagga ttcccatat  540
gaataththt a                                     551

```

<210> 8296

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8296

```

gtttccagaa gagaaattht atctaattth catacttcta ggtacatcga taacaaaaat   60
gtggccactg aaaaaagtth aaaggthaat cagctcctgg ctcttagctg gccaggatt  120
gcaaaataaa aagatccacg ttccttattc tctacacaaa acgcgtththt aaaaaagtga  180
aaggthtagg gagctataca tagaaagcaa cagtgaagaa ggagaggag caggagthgg  240
ggaggagagt cccaccccc aacccccacc tccagggcc cagagcccct gaggtcttht  300
ggggggcctt gacatggcag gaggcagctg tcagctctga gctcttcca gctgggaagg  360
ccctctcgg gggcagccaa caaggattht cgtggcattg tgggctcagt ggggggctcc  420

```

caggccccag caggccccac agagggagcg tggcttcct gagcaagcac cgtggcatga 480
 tgtggtcgtt caaccagga actgggggtg cngggcaagt cccgggtctt acgaggtgcc 540
 tgtttgtgtg tggt 554

<210> 8297

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8297

cacagaaccg gagtatitita ttgcaccaag atcttggcaa cacgtggggc tccccaggcc 60
 cccggaaagg aggtgcagag gatgggacac agacctctgc acacacacag gtgcggccat 120
 gcaaccagga cgcggggcag gcaagtgaga ggacctggga gaggtagctg ctgtacacag 180
 gccccactcc ctccagctcc attcccaagc acaaaattca acagaccag atcctaagtc 240
 aaccaagtga ctgctatgac aaaggcttgg gttattgaca ttacttaca tacgtgtaca 300
 agacctagag tttgaactcg ttttctgggc ctcatcttcc ccttcctat ctggttgatg 360
 acttcggtgg agggaaggga cgtgactcca cccaacagtg ataaacgctg cagaaagtca 420
 tctcgtgctc accactgccc aagaattaac gaatgtatgt accccaggaa aagggtttac 480
 agttatctag tggagaaggg aanaaactga tttggaggaa aagaaggag agaaaggacc 540
 cagataaatt tnn 553

<210> 8298

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8298

aataattact ctttatitaa aataaataag ccctcttact tacagggaaa atatgaaagc 60
 aaactctgtc ctccctggtct aagacagaaa ccacattcag aatatgttca ttgaaaaagg 120

aaagatttgt tgattatcaa acaaattctag gtacttcaat acacattggt tctttgaaaa 180
 ataaagactg aaaggaataa ttcatttcaa aaagtcacag gttagaaaac caattttcct 240
 tctgaggctc attttagcaa atcctccaag tgttcccaaa tcttttaaaa aagctacatc 300
 ccctgagaaa gggccctttc cctgtagccc tcttgctctg acaccagcag ccctgcaccc 360
 ttctgccaag tggctccctg caggacggtg ctgttgccgg gcaggaatgg ccctccatgg 420
 caacctccag caggcaggag ctccaccact gctttctgca aactcactca cttggctcag 480
 ctattctgca atggaanagga agttccttac agccaaagta ttctaagntc acattttinca 540
 gtt 543

<210> 8299

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8299

aacttgtctg tattttctgt tattctacca caaatttctt tcaactcttt ttataaaaaat 60
 gcctgtctcc ttagttgacc tctaagtctc taggttcttt ctttttcttc ttttcttttt 120
 cttttttctt tttttgagac agagtcttgc tcttggtgcc caggctgaag tgcaatggcg 180
 caacataggc tcaccacaac ctccacctcc tgggtttatg tgattctcct gcctcagcct 240
 cccaagtagc tgggattaca ggcatctgcc atcatgcctg tctaattttt tgtattttta 300
 gtaaagatag ggtttctccg tgttggtcag gctgggtctca aactcccagc ctccaggtgat 360
 ccgcctgcct cgacctccca aagtgctggg attacaggcc tgagccactg ctcatggcca 420
 gttctttcat tttttgagtt tctgtttctg atctaaagtt taccactggt ttccaatttg 480
 tttgtgaagc anagaatatt ggcacactta gttgcttgca taaacattcc tttcctataa 540
 gatatagn 548

<210> 8300

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8300

```

aatagggat gacatttctc catgtttgtc aggccttgga ctctctacgt caggtgatcc 60
atccaccac ctcggcctcc caaagtgtg ggattacagg tgtgagccac tgcgcctgac 120
ccttgtaggt acttcttaaa gctatggggt tttcccagag cttggtagca tgtgtgttca 180
aagggtatc aatgttgagt tgcctagca ggcactggat agagagcagg atggtcctga 240
tatcatagg ggcagaccac ttctccttca ggatgtccag gcatatgtta ccctgggtgt 300
ccacgttagg gtggtagcag ggtgtgagga acttcactgt ggggtgcatg taaaggtggg 360
tagtcattga ggaactccag caagagctta tacctcagat cttcatacac tgtgccagct 420
gcttcattga tgggtgtccat ttgataaggc tttcagggtg ggcagaaatt cttttgtcac 480
caggcatcat gaggggtcat caacttctgc tgtacctttt ggctacaggg ncccaagcaa 540
tgnccctgnt gg 552

```

<210> 8301

<211> 499

<212> DNA

<213> Homo sapiens

<400> 8301

```

actgtttgtt ttttnccaac agagttnccg tcttgttgcc caggctggag tgnannggca 60
tgatcttggc tcaactgcaat ctctgcctcc caggttcaag cgattctcct gcctnagcct 120
cctgagcagc tgggattaca ggcatgtgcc accacaccg gctaatttta tattttagt 180
aaagacaggg tttctccatg ttggtcaggc tggncctgaa ttcccacct caggtgatct 240
gcccgccttg gctcccgaag gtgctgggat tacaggcatg agccaccng cccggnctac 300
tagtgtttta tctttgattc tctgtcagcc ctacccctg gttcttgcct ttcttgatca 360
acaccttttc ttgcctnigt ccccttctct cctgtatct ctactcccc tccaacctgn 420
gggacagtgg tgtggangag gaaccatagg cctganagtc catctgactc cttnctggac 480
ccanaagcan gagaaggng 499

```

<210> 8302

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8302

```

aatgttcag tcttttattt aaaaactata aacagtcacc aaagtaaata aagccattct 60
ataacataaa ctgttaggtc tatatTTTT actgcacatc ctaaggacac agcagaaatg 120
gtggttggga ggccttcac atttttggat gctaataga caggcaatag gcagttataa 180
atggatacat ttcacgctgg gggaaaaaag acaatttaag gaagtgaagca gtttctgagc 240
aggaatgtgg tacagtatta agaatggaag aataatacaa taaaattcca cactatatta 300
agatagaaaa agtagtgaag aaaatatcat acctgcacat aatgcatata taacacagga 360
gaaaacctgt ataaaattcc atgtatttaa accaatttac aaatacaaaa aattctgtcc 420
aagctctgag cttgtacacg acaaacgttt acagtggata catgttaagg aaaaccaaaa 480
aataccttca aatagttttt cttcttaaaa aatgacctga gatatatatt tccatactct 540
tttagccngc aaaatgaggt 560

```

<210> 8303

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8303

```

ggcataacac aatcaggctt tttttttttt ctttttcctt ttaaataata ggcaacttgc 60
caacacataa cttaaaactg gtcttcagtc acattgcttc agatcactag agaatttctg 120
gctaacgaac agtagtggat agtgaacaaa atgcaaaacc ttaaataaga accatcagct 180
gacattcccc agagacaaga ggaaaggtaa gggcttattt catctgtaaa aaataaaaaa 240
gccaattct gcatctttta cagaatggtg caaaaatttg taacaaaaca gtctaagttt 300

```

aaaattacag aaaagtgttt ctagccaact aattgtcgct tgggatgaga cgtgctgagc 360
 atggagtgga tgaaggatg ctctaagaat ggacagaggg caggaggggc ttgtttccaa 420
 tgtaggccca gcttcagggtg ttagaaccat gctcatttgg taaangaagt ctcaaagagc 480
 ttaangcttt gggttgggtt ttttttcctt cattaaactg aggggctgca ctaanggtga 540
 atctacctgn ggg 553

<210> 8304

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8304

atttccatga attcaaagcc ttttaatgat gtgaacactt actccccatt tcttttttac 60
 attgttacia aaaatttaca tacagttttc tgaaagtggc attttgttgg ttgttattat 120
 actgatgaca catattaaca ctttgtattg aagaagtatc ataaaaatca cagggcatta 180
 cagatttttg ataagaagta gtaatagcat tgtcttttaa cagctggagg ctcccaggca 240
 tactcttttg tgagaaatga ttaattttat attttcattt tgatgagaat cttttcttgt 300
 tttaccagt tataaaaaca aagctttttc tttgttgtga tactgtgcac taagacttag 360
 tttcttgagc tgatgctaaa taaaatgaga tcaataggaa tattccagga ggctgtgaga 420
 agtttttaga aaggatggca tctacatata tatggagctc tgaaaactgt tggagagtat 480
 gacctgggac tgaaactgtg gagcacatag ccaggtcaca ngcttcgana gcnnaaagag 540
 ttgctctg 548

<210> 8305

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8305

agtataataa ctttttatTT gacatctaca agatTTTggc atcttgcagc tttttaccag 60
 gtttatacaa tctcgatTTT tcaatagtgc aacctgtgga agcaaaaaaa aaaaaaaaga 120
 aaaaaaagaa aaaaagaaaa gaaagaaaaa gaaagaaaag ataaaaagac caactgtccc 180
 ctcacttgTT tttataaaca tctattatag gcgaaacaaa acttaccat attatataga 240
 taagtgtcta ttcacatttg tacattacca tttttaacag cttgagataa actctacgtc 300
 ttacaacaca ttaaacaata ttcaagttac tgagtaacaa caataacaac aataacaaaa 360
 gaacacacag cagaagcctc aagtgtttcc tcattgtcta caactcaggt atggtttcct 420
 ttttatgagt gacaaagcaa attaagataa tgaagtaaaa aacgattgTT tgcaagatga 480
 aagccaattt gnacttcctt ctaaaactac ctttaagttg caaatgtaaa ttttaagaagc 540
 tnatagccnt 550

<210> 8306

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8306

ggcttagtgc aacaaggtat ttggtggtct cacatgactt gaacatccag gcctggctgt 60
 cacgggaacc gcattctctc ccattgcagc tacttggcag gtggcgggat gtcccccagc 120
 caccgacgtc cccctgcctg ctccgcaacc ccagggcctg cagaaaaggc ccacgagact 180
 cagactggca gagacttagg cggaccagga acaggggcgc agtctccgtc ccacccaaac 240
 cctaaccaga gagaacacgg cacgttgtgc cagacggagg acggatgcc a gcgagggtcc 300
 atgtcctcac tgccgacaag gctgggagct gggccaagtg aagcagaggc ctncacgtca 360
 gatgtgagcg ccaccggccc aggtgactgc agttcttccc tccttccgtt cggcttgagc 420
 ccttcagagg atcggaaggg ctgaagcctg acctgggtgcc gttgtcctgg gtgggtctgt 480
 cctgctggtc ggttctgncc ttttcgggag gttggctggc acttgcangt ggaaagcttc 540
 tgngttacct nagggaaaag ngg 563

<210> 8307

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8307

```

ggagagagat gtatttatac cagtggggct aaggaggaag cagtccagtg ggggactttg   60
agtgtgtgc agtgttctct taagagtcgt agtacagtcc tgggtcaag tctctttccc   120
taatctttgc tggggaagcc ttgagccttg atttatcctt cccttggtt tgggctttga   180
ggaagtggg gatggagggg atgatgcttc tttaggtttc tctattcaa gccctctga   240
atttctagtt gcaacctgcc ttcacacaga gttgatggga aagattagtt gtagatgtcg   300
gtatgggatt gaggctacag caagaggaag aagggaactc cagtatagag tacacaaagg   360
aaaagggcag gaaagatacc aaaggcttat gaaaacaaag gaagggaaga aaagagaaaa   420
aaggtggaag atcagggtccc agattgcttg ttaggaagaa tgaggtaatt ttgggcctag   480
gaatgcacaa tccaaagctt gattttcacc acctncattg gtctcttcga gccttccttc   540
caaangttct tcccggctta aagccagcan                                     570

```

<210> 8308

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8308

```

cttgtcccat gggcacataa tttagaatac atgtcttcaa atgacaaaac atcaaagggtg   60
agaggagga ccaacaatga acatgatctt ttttaaagg gggtaacaga aatagtaatc   120
ttttataatt ataaatcttc tgcataccat aaaatgattt ggtttagctt tcaaacaatca   180
tctaaacaaa caacaagac agagaggga gttcactgct ggggtttgca aagaagggca   240
tctgttcgtg ggcagatgct gcagggtggc tgctgaaaag ctccttttat gtgcatgatg   300
gtggtcttct cggctacagt acaagtgctt gtgcatcaag tataaaatac aagcctttaa   360
tcacatagat cagcttttta gcttttgtaa atttaaaaac aaaaaggata aataaggcac   420

```

tgtactttta aaaacgaaaa ctgcttggtt ccaagtttaa aaccaagga caccagaata 480
 taatatataa cttccttacc tcagagaagg actctgcaag gttccttttc atctgagaag 540
 catttctggc atctaa 556

<210> 8309

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8309

ctgtggatat tttaaaagtt tatttctatt ttaactagcc cacagacccc attctttgag 60
 ggctgatctg atttctgaca aatggctctat agaccctcct ctcggaact tccaaaaaag 120
 tctgcacctt ccatcatgat gcacatttta agttaaaatt gccaatataa cccttaaaat 180
 gcaagtttat tgaataaagc tgagaagagc agtaaacaga caaaaaatgc atccacctaa 240
 ataaaaaaat tcacatattt acatagttca gtaactgtta aaagttttca catgcagagg 300
 ttaatgcaca ggaaaatggt ggtaatagcg tctggatgtc ttgaaatgcg gaaagcaatg 360
 tatagacaca caaacacatt aaggttttagc tataggtcaa ttaacaaacc tatgcagtcc 420
 ccacagagtc acacattcta gticcaattc ctccttttag gcacaagcaa gttggccaca 480
 ttctttttna atgggtcaca ctggccatta anggggttga acaccgtnc aggttnaaaa 540
 tnccttcatt tccgaanc 558

<210> 8310

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8310

gtttttgagg agatgaggtc ttgctatgtt gctccagctg gtccttcact tatttaatcc 60
 taccagctag tgttctggta tctcctctga atttttaatt aatttcactt ccagagaatt 120

aagtattatt tttgttgaca gtttgttctc tcaaacggca ttgcatttag taatactttt 180
 ttagttgttg gggtttttgt tttttcaa at gttactaatt tgtttcctt tccagctgaa 240
 gaaatagtga ccaggggagt aaatattctc aggccactgt gtttgtatat tatggacaat 300
 caagaaagaa ctaggggatg ttagagacag aactccagag gtcaggtcat ctccgtctac 360
 tcacttggtg gacttggcta agtcacgtga tctctctggg cctccatttc ttcacttata 420
 aaatgggact aatactttca acctagtaca tgaaaagaaa atatgctgat tggacccatc 480
 ctacttctgg tagnaacctta caccagagcc caggctgggt ggtcatggat ggtncctgc 540

<210> 8311

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8311

agggtgaga aaatattcag tttattaa at attgtgaatg ggtggaatat cagatacatc 60
 atctcaatat gtaaatatcc tatcccatct caacatcaaa ttagattac ctggatttct 120
 tctttgcttt tctctatgat tacagcagag atcattatgt atttatttag tttcttcagt 180
 cttaaggta tttttggatg atgttcaa at aaactccaag ttatctcaa ctttttctga 240
 acaaaatatt tccattctta agatacaggc ttgtaattca catacttgat gctactcaat 300
 ggcgtcttat ctgtattttc ttctcacatt tgactccaga gtattcagtg cggcaggaac 360
 acacattggg gaaatatgca tctgcctcca taaagacatt ttgggttgca aattggtatt 420
 gacaccggac tccttncag gaggaaggac aatggcatat gctgggccca atgcattcac 480
 caccgtttta ctttctgca agcnnaaang nggtgtgcat cgttcccact ccacca 536

<210> 8312

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8312

```
ctcgagacag ggtctctgtc acccaagctg gagtgcagtg acacaatcaa ggctcactgt 60
agcctcaatc ttcagggtc cagggatcct cccatctcag tctccttggg agctgggagt 120
aggcatgtgc caccatgcct ggctaatttt ttaatttttt ttagagatg gggctctgtc 180
atgttgccca tgtcgggtc aaactcctgg gctcaagcga tactcccacc ttggcttccc 240
agtattggga ttacagggtg gagccaccat gtctggcttg cttctctttt tgtattctaa 300
aattcaaagg cctaagtatc aaatccctaa atctccaaat actgtcacag ataaagactc 360
aataataaac tccctccgaa agtttagaca ggctcagggtg agagacttgt tcaaggggtt 420
ataaaaagaa acaccagtgc tctgcagaag aatcaagttt ttaatttttt taaatgnatc 480
tattttaatg ggaataagtt gatcattaga atttgtaaac caaaanggta atttctcaag 540
ttt 543
```

<210> 8313

<211> 462

<212> DNA

<213> Homo sapiens

<400> 8313

```
ctggaaacta aagattttta tttaatccaa atgttgcact ggaagaagaa atcaacagtg 60
gtatatttac ttaacaagga tgtgtgtaat acaagacaac cctggggatt acacacttga 120
aggaatggaa gtggcaaagg ttaacaggca gaaagcagct ggatgaaaca gtttattttc 180
atcttagaag attctagcta tctgtggaga ccaccactgt tccccgaaa gctaaagttg 240
ttaagtttgt aggagtacca caggtccttc cccctgctgc aagacagaga ctgtctctgt 300
tgcccaggct gcagtgcagt ggtgcaatct cagctcactg caacctctgc ctcccgggtt 360
caagcaattc tctgcctca gcctcccatg tagctgggat acaaggtgtg tgccaccatg 420
cctnggttaa ttttnggant tttagtanan attgngntt ta 462
```

<210> 8314

<211> 491

<212> DNA

<213> Homo sapiens

<400> 8314

```

ctttgtccaa tgattaatat ttgatatct attgacaatc ccttagaact ttaaattctca   60
aaaacaaaaa agtactgtgg atctccatag ttatacaga attatgtgaa ttctataaac  120
ttttctgaac aaaacaatta catgtcaaga atccatgaag cctggaagat acgctcacgt  180
ttttgaggtt tgtattaatg ccagttttta ttgtattaga caaatgctct ctgagaatcg  240
aagacttcta aaggtagaca ggcccagttt cccattagag ttctggaagc agagcctggg  300
gaaggtctgt cacttgccca tctactggacc agccagaagc cagcgggggc caggcgggggt  360
ctgcaggctg caggtccttt ccagtcctgt cctgtctgcc ctttggggac catttttggt  420
aanaaccttn gccggttgnc ctggaanctt cnagcnccct taccttaggc ctaaanggtt  480
cctgaaaccc c                                     491

```

<210> 8315

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8315

```

ggagtaggca tgggtcaatg attgtttatt gaataaatTT actactggag taagaagtgg   60
cttagagtcc agtgtaacat ggtggctggg agtgtgagtg gatgaatggg gggcccgata  120
taggaactgg ggcctcgggg atgaggccga gttccatcct gccttcttcc acgaccatcc  180
ttaccttccc acccccaccg ctcccattct gcagatgaga aaaccgaggc tccgaaagga  240
aaaaccactg cctggattcc cacgcctctt ctttaactca tttgcagggt agggcaggga  300
aggaaaatcc tagggtcagc attggggagg gggggactct cctaaattta ttgggcaaca  360
ggctgcaggt ganggggctg acaggaagaa gggtcggggg tgtnaataac cttaaaaacc  420
gtaggtgaca acnggaagtt ctttaagaan accnttgccn aagggaagg ttttgggggg  480
ttttccaagg gttttgcaa aaggnccccg gccaaacctt gggccagaaa atgggggttt  540

```

tannccttan gggnt

555

<210> 8316

<211> 467

<212> DNA

<213> Homo sapiens

<400> 8316

```

aaagatagag ttttgctttt gttgctcang ctggagtgca gtggcacaat cttggctcac   60
tgcaacctct gcctcccagg ttcaagtgat tctcctgcct cancctcctg agtacctggg  120
attataggca tgcgccacct tgtccggcta attttgtatt tttagtatag acgggggactc  180
aaactcccga cctcaactca tccgcccgcc tnggcctncc aaagtgctgg gattacaggc  240
gggagccacc gcgccgggcc atcttagatc ttagagccca ctttagtcct tgaaatacat  300
ctgagaagcc aatggcagcg aatgacggtg cccgcctgcc ccaggcacct tgggtgggcc  360
aggccctgct tcaggagggtg gcggccactt cngggatnac tgatgcagcc ccnaccacca  420
tggtttgtcg ggactaanct gngtcttnaa ggtntgtgaa acttcca                    467

```

<210> 8317

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8317

```

caggtaaaac cacattgcct ttatttggct aaagaacaaa atccaaaata actcagaaca   60
aactaagaac agacaggaaa attacagact gaacccccact tgaggaagac ttccccacgg  120
actcacactg gtgatggggc gaacgttcaa gacgaagcca gcagtccttt ccaagactct  180
tttgtctttt agggatcctc aatacaaaac aaccctaata atccaggata tgtgttcaaa  240
acagtcagtt ttccccctca aaaggcggga aggccactt caaacctcca ggaacacaac  300
ccaagtcatc ccagtgttaa acctgggtgct tccgttttct gcctcaatcc gagcgctaac  360

```

ataaaatctt ggcagacaac aatctttctt tttcaagaaa attaacattt aatgggataa 420
tccaagaac atggtctact taatttgctt tggaaaattn aaacttnggg nccctntttn 480
ttccaaggg cngtnttttt ttttgagaa 509

<210> 8318

<211> 518

<212> DNA

<213> Homo sapiens

<400> 8318

aactttacaa aatttgtttt atatctgtta gaaaatgtac agacataagt attttcagtt 60
gacaaagcat caaaccaggt tctgcctagt gataagtttc accctagagt atgtatgtaa 120
cgttttagct tatccatcct ttcttgagc gcctccattt ccattgaaag ccaggctgga 180
gcaggaccct tttggagtag tgactcagtt gcttccaaag cccctgctat tgtatgcagc 240
gctgacctgt actcttcttc ccaggggaac tctgacgag ctctttttgc ataaggctgt 300
aaagatgacc tctttgcttc ttctacagtc acattagcaa agggttccca gaaaatacct 360
ttttcctgtt tcacacgttc cactttggca agcttcagtt tcacttacia acccagcttt 420
ntccagaang ggtccacttt ggtccttaag tttttttana acttgggaca cnttgggaac 480
cttttcttta agaanttggg cccntaaggg aatctggn 518

<210> 8319

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8319

aaatttaaaa agatgtcctc actgcacaag tgactacggg ctacaggcaa ggatgggaga 60
cggaggcttc aacacaactc attgcactta gaaccgttac taaccgaaac accatttgct 120
tgtcaacaat gtacccttga cagcagggag aaacttcttt atagtctctg cttcagacaa 180

gatttacagc tttctccaag gccagaggcc aattgtgacc acaagtcttg tttcttgtcc 240
 accagaccca atcctctggc acctgtgacc ccccgttcct cagcaatatg ctcggcctag 300
 gttccagagg cagctggaag gaagcagcta tgggctcatt cagttctgtt tgcccaaadc 360
 cagaagccct aggaaagtcc cgtctgagtc ttgactcctg gacccttcaa tggcttgaag 420
 tccggtactt gggcacaacc ccaatttcac cggggtgggg aangctttga aattggaaac 480
 cncnnatanc cctggaggcc ttggnaaaaa ntt 513

<210> 8320

<211> 508

<212> DNA

<213> Homo sapiens

<400> 8320

gttcagagta gctttatattt aatagccaaa tattggaagt gatccaaatg tccatcgaca 60
 ggtgaatgga ttaaacaacac tgtacagatg tggtatatcc atacaatgga atgttattca 120
 tcaataaaaa gaaaagaatt gacacacaca agacacaaga atctaataaaa taattatgct 180
 gcgtgaaaga agacagacaa aagaagagca cgtactctat gattccattt atataaaact 240
 taagaaaatg caaacgaatc tgcagggaca gaaagcagtt cagtggctgc cagagagagg 300
 gttttctcag ggggaagagg cctaagaaaa cttttgtggg tgatggatat gatccccctg 360
 ttgattgtgg tgacagtttc acagatgtaa acatatggca aaacttatca aattatccac 420
 tttaaatatt aaccctgtgt tggatatcaa ttttacctta attnggnctn gttttaaaaa 480
 aantttgnct cncaagctta aaaaaggn 508

<210> 8321

<211> 490

<212> DNA

<213> Homo sapiens

<400> 8321

```

ccatatttca tttccatfff attacatgtt cacattatft cctgaaatca tcttagaacc 60
ttttgttttt gcaaaatfff agagggtccag gccctgtgat agctatgtga tgttttttcc 120
agcacataaa gcaaattcat gatgtgaaag aggcaaatga caatagttaa agtatgtcft 180
atfttgtaat aggatftttt taataaaaaa ttattgtgga acaaggftaca ttaaatttgg 240
cttgcaatta ggaaatatgg gagccggact tgaagagcgt gtgattgagt ccccacatnt 300
aactgatgag gaaacaggct cagatgggtc tattgatggg tccacttgct agaagcaaaa 360
ctggaactag aaaccacgcc ctggcttcta ggcagcaagc aataagfttt tgctaaatft 420
ggtncccaac atttaaaacc aattcccca aatngggaaa gncaaanngg gttttaantg 480
gggntftttt 490

```

<210> 8322

<211> 399

<212> DNA

<213> Homo sapiens

<400> 8322

```

aatgaggcac ctgnngggact ttattaggta aacagacccc agctccagcc acaggcttgg 60
accggccagc tgacagtgcg gcctcanaca ccccgccag gtccctcct cctcctntn 120
tcagggtcac cagtgtgtga aanatcggg catgccggcc acagggggaa gcagggttca 180
ggctgcccc cctgggtctg gccctggcag gcgccccctn acctggctnt gctgtgggag 240
ccgagaacaa agacatcacc tgcctggctc ctgctgcccc ggggggtcaa gccagcacc 300
acctnacag nggcctgggc aggggctggg gtgcaaagcc taccctccc ctgtgagcca 360
gacngnaaat gcatttncca aaatgtntcg aggggcacn 399

```

<210> 8323

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8323

```
gttgacacaa aatcttttta ttccccattt gccatctttt ccacaaacct ctcaggtaca 60
gatcggaaga aagtgcataa aaaccctgcc ttatttaacc aggcccaccg cctccgggac 120
agcccctggg ggagcccat cccgctaggt agaagggaag gccacaccaa gtgctgagt 180
agccaccag acagcaggtg ctctgggagg gaggggagac aagggtagg ggaaggcttc 240
ctggaggagg gagaggcctg gccctgagag acagggggcg gtccctgaaa agggagagag 300
aaggcacact tctccgggaa ccaggcccca gcacctgagc attggacca ggcggccagg 360
aagaacacag gccaaggcgg gggcctgaac caaatgggga ctgtggaacn tcagggaaca 420
gccnnttttg gcttaaggct ngagtntaaa aggaccttct aagggttct ggttgntgg 480
ttccaaagga ttccaanggg aaaccatgcc tncctaggnc ccaccgntgg 530
```

<210> 8324

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8324

```
gttttttagtg tgattgcatt tattcttata aatgtacaga gctgtagaag tgcaagccaa 60
gagttctata gagtagtaca taaacacat atggtaccac tcctgctggg aggtaagcct 120
ggatacacc ctctcctcag gaaactgtca cctgcagaac acacagcact cagaattaag 180
gcagtttggc cctgggcaca ttggtggtat ttggtatgt ggccactggc cctaaacaac 240
tgaccatttc taccctgcct cactgcactg tcccaccagg tccctccagc tttttctaca 300
aggtaacacc ctctacatg gggtcagcca gctcagaaac ctcttctca gggacagttg 360
cagctgaata tgccagagct gattattaca acaacgatgc agagggcctt ggttttgggg 420
cctgncacc tnaccctaga actggttaac acccaagcca ntctgcctga ccaccttccc 480
aacagaagat gtaggctatc ttaccttcac agcancttcc angacaaaac tngggccttt 540
acctgggtgn tggct 555
```

<210> 8325

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8325

```

aaaaagtga acttcaaata cagcggagggt ggcttctttc ctatgaggct ggctgatggg 60
tgccagatac caaggcccat gtgttactga ggagacagcc tgctgggctg gggtcaggag 120
ctagcggagg gaaacggtta gatctcagaa aaatctcatc actatgccct agtagcttaa 180
tgacatcact agcatgagca catggtgtac ttggcgggat cttacagctc tgttgcccat 240
ctcaagacct aagaacaatt attaagttaa gccaaatctt gcatagacgt ggtagaatt 300
tattgcacat tggaacaaaa atatatattt tttgttgttt tggaaaagac cattagcaat 360
aaaaaatttt ttgtctgtct gtctggtttg gggatgtaca ttggctgaca gcatctaagt 420
tctaagaaga aagaaaaagt nttaaaaatn aaaattaacn tgacaatggc ataagccaga 480
agccatttcc tatttaataa gtaataattt ggattttcca aaaagnatgc ccattaaata 540
aaattttttt cnggtttat 559

```

<210> 8326

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8326

```

aaaagttaa ctttattttt ttttactaaa gttcagaaat ttctgtaaga caagtacatt 60
natgaaatgt ttccaaagaa atactgaaca atatatactc tagtttgctg aggttccagc 120
tcaagagttc aaacctaatt cttgtgcaat aaaaatcagc atggatctta gatgatctag 180
aatacactgt gttttgaaat ccacagctgg tttcattttt aaccattatg aaaaaccagt 240
actcctattc catcaaagt gttttataag caataataaa ttcagatcca ctgtattatg 300
caacatacat ctttggaag caacataaac agtgagatca gatcagtaga aatatacaca 360
gttaaaagaa atacacaaag tactgtagtt tttattaaan actactactt gagaaagaaa 420

```

tctttccaca aaatngcata aaactgttga atgatgaaag ggtttgggaa agcttttcca 480
 aaagcttaat tncaatggat cttnctgang gttggggnc a anggnattt ccttcctctc 540
 tggganattc ctggctccct ccacgaa 567

<210> 8327

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8327

aaaatatttc aaagtgtagt acacatttat tttcatttgt tattttcttt catagcagat 60
 tacagagaaa gaaagaaacc tctggtttca tgttctccct ggaaatatta gcattgatac 120
 ccattttatc ctccaactta tgggggaagg gaaagtaaaa gtgagggagg gaagagccag 180
 aacctttggg tgagggcaac tttgggtcag actgccaggc tacagagtta agggaagctg 240
 gccccagaac agtcctgttg cgattctgtt ctacttcctg cattccagca gacttgacac 300
 tgggctccca gacgatccag gacacaatgc ctcactgtta tgcacacgta tcagctgctc 360
 tggtaggctt gacaagggtt tgctttaaat gaagggtttg ctaatttggg acccttcctt 420
 catatagttg ggcctgtgcc cccagagca gacattnctt ggcctgnata cctgacacag 480
 cttgngagtt cctgcatgtc cccagcntta ccaatggatc cgtaaagggg agacttcact 540
 tgccccagct taaaacagg 559

<210> 8328

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8328

gtccatgagg cattttattt gtaaataatnt gtattacatc cctagaaaaa gaatcccagg 60
 atttttcctc ctgtgtgttt tcgtcttgct tcttcatggc ccatgatgcc agctgaggtt 120

gtcagtncaa tgaaactatg gagtggaaaa agaaagtgct ggtaagttta atagttcaac 180
 atagtgcctt ntagtgcana aaaacatcaa cactcatcag tggttaaggg cgctttcctg 240
 tggggcacat aggaactgac agtgcctaca tganctgggtg cctcatgtag cgtatgagcc 300
 atgactcctg caacccaaag agccaaatnc agagagccca gccacacant cacacaagcc 360
 ctgacttctg cctacaccat gaaacaaact gcactgaaaa caaaaggctt gggaactnct 420
 ttaaattcaa aatgttnactt ttctgctttc aggttaaggag actttgaaag tatttcgnat 480
 aaaacttggg gttttgnaat tgnngtttct nccntgtacc tgnattaata 530

<210> 8329

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8329

atagagagat ttaagtttat tgaaatgtgt tagaaacagg ggaagtatct acaagcagaa 60
 tcgtaaagcc aaggacattt ccaaattaat agaaaggaag gaaacagaac agaaacttga 120
 cccatccaaa taaagcaggg gagaagtta aaaaggaaac aaaaggaaca atacacatag 180
 tataagaaaa aatgtctatt atttattaca caataattct gaccaccaac aaccaacggc 240
 gggggcgggc aggagagaag aacatcttgc ttctcaacaa actttcctcc ctgtctttaa 300
 catTTTTgag gattctttcc caaacctatt acacctgtat tatgatggtt acaaattttc 360
 caactcttcc actccttcca gtgcattatt tttagtatct tcattaaacg ggcaaaaaaa 420
 aagatcccct acttgtaata acaaaacaat gttggaactg tcattaaatc aggatagtgg 480
 aaaacagatc tgttcccaga ctgtcaggac ttttaggtta ggaagtcccc naaaaaatta 540
 aaatt 545

<210> 8330

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8330

gttttcaata cactcatata tttttacttt gtaatacaat atagctgtca catacaatgg 60
 ctctagtagg cttaaatcaa attgcaatgg gcaaggaaag ccaaagaagg gtttacacaa 120
 tattcaataa gcaacagtat ctgttcagtg tgcaataaaa taaaaaagtt ctaacctaga 180
 aacacagaaa aagaatttat tgtttttaag tttcagaaat aaaagtaaca gaatagtgtg 240
 taatctgtaa caagctgggc ctgtaatttc taaactacag tccaattaaa acatttaagt 300
 aatagaaaca atctacatgt ttttctacca ggtaaatata cctgagaggg ttacctataa 360
 agaaatagggc tttaaaactt ttaaccacaa agaaccttct gctgcgacat tatgaagatg 420
 ggctatgcat gtngncagac tnagtcantt tcccggagat tctgctcact gnttaactgc 480
 aggtagtggg ccatcaatgg ncagagtntt taccatcaat accagttcat tcaaccaaag 540
 an 542

<210> 8331

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8331

actgnatgc ctttattaaa ttttgcctta aaaattttta atgctgcatt tttataattc 60
 acaatagcaa caaaacatga caattatttg tgtgaaatac agtctaagct ctaaagggtc 120
 atagattaca ttcattttat accagggttg ttcatatata tagattaatt catcacagta 180
 tacttatttc ttaatatatc tgcattttat caagtaaaag aattaaatat taaaagtagc 240
 ttgacaaaat acagaaatat tctgtgcaat aaatttggtg tcaactgatt catgactggg 300
 tcatgaatca tgactgatgt aatcttttta tctttctgcc cagcttctct tacatgatcc 360
 ttgggaaata gccagttgaa aagaaatatg gcaagggtatt ctagaatggc cactaaccat 420
 agagtcttcc aagatgtgca ngttgctttt tggattcttc ctgnaggnga tctggctctt 480
 ctagaataca gggatatctn ggattaaaaa agtccgantt tccatcatgaa ng 532

<210> 8332

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8332

```

ggatacataa tctttcactg tatttgaggc tatcttgagt ctctggttga gatctgggtc   60
actaaggctt ctgggggatc atgtcttcaa caagccttcc aatgaatgtc caaagaaaaa  120
catataatth cctttttatth ttttttttac caaagttctt atgaattgga aaataatttg  180
tttcaaagac ggtgatgaaa ggaaaaaaaa agtttaactt tccaaaggta atgctttcat  240
gaagagttag aaatagcagt tttagtaatt agttgtagga attctggtta agacttcaac  300
atthttacctt acttaaaaga ttgcttttat gcaacattta atgcccagtt ttgcatggct  360
ctaaaaatct ttaaaatgca aaagcttttn cagtgactgg aagccaacac gacaagaatg  420
aaatgggntg accngngaat taaccngggt tataaaaaaa tcccgttcag agacccttta  480
cccaattaag gaacttagcc attccttaa tgggnntaac ccttgggcaa                530

```

<210> 8333

<211> 348

<212> DNA

<213> Homo sapiens

<400> 8333

```

aacatcacat aagttttatth cagatgtaac agcaatgtta aaattgacaa gtttaattct   60
taactgcacc aagtaaactt agccatttaa gtatthttth aagttattcc ctccaaaaaa  120
ctgaggggagc ttttctthtc caccaccgca ccatggthtc ccaatagtth tctthtttga  180
ggactthtca attgatgagt aaactgctth agatattthca gaacttcatt ccccaaata  240
aagctaactt ggacaaacta tatattgcat agattthctt acagattctt tgnthtaaaa  300
cctaaatgcn actnaccata ggtggaaatt taggcnantt ngcccanc                348

```


<210> 8334

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8334

```
cacaaagaat cattttatag attttttttc ctgtgtggat tctctgatgt tcttaccacc 60
cctattactt ttataggatt tatcaccaac atggattctg tgatgaactg taagatttga 120
tcgccaactg aagctcttac cacatatctc acatttataa ggtttctccc cagtgtgaac 180
tcgctgatga gactgtagtt gtgaagaccg actgaagact ttaccacaca catcacattt 240
gtatggtttc tctcctgtgt ggacactctg atgaagttga agacttgagg cctgactgaa 300
gtacttacca cactccccac atttatatgg tttttctcct gtgtgcaccc tctgatgcat 360
gtcaaggttc aagctccact tgaagccctt cccacactca tcacatttgt atggcttata 420
tccagtgtgg actttttgat gggcttgaag atgtgcactt ccgacccgaa actctttccc 480
acattcttca catttgaatg ggttttcttc actggnngac ttctctgatg ggcccaaaaa 540
atttgaggcc
```

<210> 8335

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8335

```
aatgttactt tgttttattaa catgtcgttc taaatattac ataaatacag cttacatact 60
agagtatcaa acattgttcc agtaagaagt tcaagagtac atttagggct atcttaagaa 120
atatgaatac tttggcttcc attattacat tagatgaaaa aatcaattca aataagagtt 180
gtcatatcct gctatgatta acaaaaaaac aagtagaaaa ataagagagt gtatttaaaa 240
aaaataatca aatgcttttt gaaagacctg ttctcttcac tgccacacat attcatacaa 300
atgacttagt aatctaatat gagaagtggc ccttcactta tattaggaac ttggtaaata 360
```

tttgttgaat gaatgaacta tctatggata tgaatttact actttaattt gtgctttttt 420
 tgaaaaaaag ttttcaagta agagcaatag taaacatact gaagttcaca tttgctcaga 480
 tcataagcct atagaacagt gatttggtaca aacaccaccc atcatagcnc aaatcaatgn 540
 gcatttttg 549

<210> 8336

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8336

ggttcccagg tttattgaca attactcatc tatttttgac tccccgagtc ccagctccca 60
 aactcgctct ccctactcca ggcttcacgg tagtcccaga atgtaggaag tgggacagga 120
 tagactttta catcaccag gcctctgggt tccaaagcat ttttttctt taatgcagta 180
 aaaccattcc tttaaaaccc aaaatctctc atggaacccc tacgtatcaa atatataaag 240
 caggagctgc ccttggttcag ggataatatg tggggcttat ggctctaaga aacacagttt 300
 gacattcact gctctcctta cttcagttac ctcatggtat agataaatgg gctgggcccc 360
 gagagggggc atgacctgtc ctgggacacg cagccactga agcctttagt ccagtgcctc 420
 ttccacagca ccacactgga ttctggagtc ttccagcca gggcagagga agctgcacag 480
 tgccacgata agaagttctg ggcttctgn acctaccctt taaaactgnt ggnccatagg 540
 cat 543

<210> 8337

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8337

aaaatcaatc agaaatttat ttttcttatg taagtacaaa acacctcttt tcatcagtgg 60

accccactcc taggcaacct ggccatgggtg cccggatgca ggcagtattc aagagtttct 120
 tccaaagtca ccagggtgaa aagccattct actacaacct ctacatgacc ttttaaagtg 180
 tacaacttat aggacagtcc tttctggagt actgtggagg gtgaatcaaa gcttccagtg 240
 taagtttatt gtctggcgaa aacaccagag ccaaaaattc caccaaggcc ctggaaagac 300
 tgaagtcccc tctgtctcat acagtaatca tccatgagat ctcccggagc ctgggtgac 360
 attacgcca tgatactga ggcagcgtgg actctgccag ggcctcctca gacccaaagt 420
 ggagctcact ttggagaagt cggagcttat ggccgtagc acctaaggat gtggctgaaa 480
 ngcccagaac aagaaagggc tttagagacc nngcncangg tnantttaa acttgggccc 540

<210> 8338

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8338

acacacacaa atcctgattt attccctgtt tctcatacat cgntggcatt gttctactta 60
 aacagcgaca gtgatgactc caaaaaaat gtttagaatt agaagtgcatt gttaatctga 120
 gtaacttaag tacagaaaag agttagtaca ccacaagcat tttctacact tttatattgt 180
 ggtgattgtg agacaaacac agtccaaaca atagacttct tgcctcccc ctccaacaa 240
 ctatctgact ccatagctca tgcaccccaa ttacagcagg tgcgggctg gcataaaggc 300
 ttcttaccag gattccagtt tacccttctc aatccttttc tcatctctaa caaaaatgcc 360
 acacatacat gtagttgtga gaggcaaagt cttctttaca ctaccacca gggggcgtat 420
 gggagcacia aagcctnaca aaactgnttc aggatcctgc cttttcaagg cccggaatcc 480
 gggggcttcc angaattcta acctgggctt ggaaagggca ttacaaataa actngcnc 538

<210> 8339

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8339

```

cttcttggct ggttctttgt tctgtccccc atgctctgat gcagtgccct cttcattttc 60
atcttcgcca tcctctcgaa gaacatgtc taggatgttt cctttgatct tgaagtctcg 120
tgaggtgctg agcttcatgt gctgcatcag gttcaccttg gacttcttag aaaggtggat 180
gagaaatfff tcatactggt ctatggcaaa gatgagggtta gggattggct tggtttcccg 240
aagaactctg gccatggctg tggcaacggc agcaggtttc tcctttttct ctcccgtata 300
gttcaggctc ttactcttat tctgtacgta agaaatgaaa gaataacaca gggggggtcag 360
atgagaacca gacagcttca ccagcttttc catatftttt ggaattcctc cggagctctg 420
acacacctgg agataatata tgacaagggc tgtaaagtgt ggtgtcattt tgcacaagtc 480
ctttacaagg tgtcacacag ctgctgatgc aaaactgctg gancanctcg tggnaaaatg 540
taagct 546

```

<210> 8340

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8340

```

aagatctgtg cgtttttattt ttgtaaacta tatctaaaac atacctcaat ataaaaaacc 60
agaaacaaaa taacaaaaac ggggtgagaa caaaaaatac agatgacagg ttctgtagtt 120
atggtactga actgagcttc ctgtcagcca aaactagaag ggaaacatga ccaccacctg 180
acttgttgca gaggcttttag atctgagcac ttggatctga aaacagtttc tcttttagatg 240
ccttcaaata agggacagta tccttgatga caatacagta catacattca caattctcca 300
agaccatctc tgtgtatata aagggttaacc tggatgaata tttctgcagc aggcattgggg 360
taggcaggca atatgaccaa atatgtagtt tggaggctca aatgaaacag gagaaagagc 420
tcaggaacca tgaagcatgg tgcangtata anggtcaagt attctaacc taagatcang 480
gtgcatgaga actggagang cctcaatctg agacttanac caaagggtgtg gaatnacttn 540
cta 543

```

<210> 8341

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8341

```
cagagcacia gttttgttta attgatttta catcacacca gaaagcatta caggacact   60
ggcgaataga agtaagctgg aacctcatca cagagctcct ttcttaccct cagcaacaaa  120
aaggcttgat cttagaagtt caaaattggt ccatatggta aagacacatt cactgcctgg  180
tcaggccttc tgtgatctgg gcctaccctg ttgatccact gtatttccag ctgtttttca  240
ataagcacca tccacacgag tcagtattat ttcaaaaagg cttctatact tgcgatttcc  300
tttctgcat ttctgaattt gtcattgtgc ttatcttgct cagaatttcc ttatttctca  360
aaagtatggg tgtggtacag attttcgggc agcagcatgt aacactttat aggtaggttt  420
tccaattgta ttggtcacag taggcagagt aaattcaata gttttttggc ttaaggnaac  480
aactttcgaa tgccctgaaa ggagtgattc agtaaangaa nggggatgnc nttaaaaaac  540
ttggaccnac c                                     551
```

<210> 8342

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8342

```
gttgctgtgc tatttgaatg catgacagtt tatgtagcta tccttctgtt catggacccc   60
tgagctgttt ctgtggggct attataaatg tgctataaat attcttgtag agggattttt  120
gtggacatgt ttctatttct cttggattaa aaagctagga gtagaattgc taggttttat  180
ggtagctgta tatttaactt tttaagaaac tgcccaacag ttttctaaaa ccattgtgct  240
gttttgtgtt cctgccagca cattgtactc tggttgtttt ttacatcctt gccgacaatt  300
```

ggattgtcc acctgttgca ttttagccat gcttctggat atgtggcgg atctcatggt 360
 ggtttagttt gcatttccct gatgactaat ggacagtact tttcatgtcc ttttttcctt 420
 ttaattggat aggactcctt tgtgcattct ggacataaag gattgtcaga tttatggggc 480
 acatatcttt tncactcta taacttgcct gttcttanna gtatctggtg atganaaaaa 540
 gggttanntt tt 552

<210> 8343

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8343

gcctttcaac aataaacttt tatttagctc aggaatctgc aggtctgtct ttaagaccag 60
 nggttctttg ttcttggctt ggacttgcct caaagtcatt cggttacatt cacagctggt 120
 tcttggctgg gatgactgga ctctgcttca tgtatttctc acatcttttc agtacattat 180
 cccaggcatg ttctcattgc agaggagcta tcccagtcac acaagagttt ttcacgcttc 240
 tgtatgtgtc aaatctgcta aaacaacatt ggggagagca agtattatgg ctgaattcag 300
 aatcaagaga tggagacagg aacttgccta gtagtgaggg agacccaaag tcatgtggca 360
 aagaatatga cacaagggtg gatgaaagat tcattaatgg nctcagtgc tctactagag 420
 caggcaaggg tgtctaaccn gaatttagta gaatggcttt tgggtggattt tttaaacttt 480
 cttttgggcc cagtgattaa aggtttcaat gaccggggna aaccaaagtt ttttttaaaa 540
 a 541

<210> 8344

<211> 496

<212> DNA

<213> Homo sapiens

<400> 8344

ggaatcattg gtttaatggt tctgaataaa tggttaagat tgatgtttcc agccaagtga 60
gatttgggtt tanatatagt ttgggcttaa gtatccttta tctcagatta aatgagacag 120
tgcatgtaaa ccacttagaa naatgcctgg aacacattaa ctttcattac taatgttttt 180
ggtcattctt aaacattttc acttctgcca ccacccttta tgcagtctgg cacatagctg 240
tcactcagca aatgtgagca aacaaacnct agagacttta gtctgccagg tctntaacat 300
gcaaagccat ggggccaggc ccatacactc cctccactga gaaaaagacn aatggccttag 360
gctacaaggt ttgggtcacc aaggaaagct gtcaaataat gaagtgggta agcagattcc 420
taaaaattgg aacnntttca gcagcagttt cattcncang gagacngagt aatgccctnt 480
tnaanctggc tcacat 496

<210> 8345

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8345

caagctccca tctagttggt ttaatcaaga acaggctcgc taatccgtag aaacaacaat 60
gcttgcaata caaagtagac ctcttaaacc aactcaatct atagaagagt tgggcatcag 120
tgagtatttc cagccataac aacatttatt agttctctgg taaacatttt aacatttctg 180
aagaaacagc aaagtgggca tgtatcttta atgtggagca ctggggacat atctggagac 240
ctacaactct gaggaacaga gacaagtgat ttgggggata ttctcgatta acaagccaaa 300
gaatcaggaa aatgggctgg aagcgggtag ccacacacct ctctccctgt gtggggcctc 360
taatatgtga ctgatgcctt ccttttctgt gcctttgaaa tctcatgcaa gattggctat 420
aggtgaattg tattacgaaa ccatccaagt tcttctagat tttattggcc tatcgcaagn 480
ctctcttntt aattcaaaaa gcngtnttc ngaaggctct tnaccctct ttttnttgg 540
ggtttaaaaag gaagg 555

<210> 8346

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8346

```

atgttctgac tgaagccttg ngcataaaac gaccggctgg aatatttact aaattctacc 60
ccccntaaa attataagca gtatttgaac tacttatgct gagctttctt catgatgaat 120
ttggcatggg gtttgggtgag agaacaaatg ttggctttac tataaaaaag gntgtgtgat 180
ggtaatttaa attttaaaag cttcttgaga gagtaattac nttagtgaag ttaaaatcag 240
aaagngtaca atttttcttt ttactaatac tgnaaagaaa aaggagagacn tataatgccn 300
agagttaatt tgntctgaaa caattatact ctttttggaa gcctattgca atttaagaag 360
aaaaaagaaa acttgcctaa caaaatatcc catnccaaac atatctagta aattcaattc 420
tttcacactt aaaactttat gggaaaagtn ttgcaaataa nggcatatca tttcaatgga 480
cttttatttg ccgnaaaaaa ccnncctttt attttagngg ggaan 525

```

<210> 8347

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8347

```

gccaatcaca aaaaacagac ttatttgaag tatttagcac taaacccac acaattccag 60
ctctgtagct gaggacacag ccacttggca atggcaccag gtgttataca agaccaataa 120
gttaatgtaa aggacgctta ggtgtggagg gccagtgtc agccgtctcc tggctcagaa 180
caaggcactc tgggctccag ttaggacact gagaggccag ggaaaccaac atgccctgga 240
gaaaggggct tagagacaaa ccggaaaagc acagcatcca agcagggtat tcacgcatgg 300
ggggcagagt aggcccaaaa gttgggggtt gctgatgcgg taagagcaca gtgagagaaa 360
tgccagggtgc atcccttcag cctcctgcat cctccccag gticccttga tgggccatcc 420
tgggtcttcc ttgnaccct tgtgcaatcg ggtcatcgtt ttcttttcag tnganaaaac 480
tgggcctttt ntanggcaaa cccccaaatt tttggaacct tttggntttt tcaaagntgg 540

```


tcc

543

<210> 8348

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8348

```
agcttaaaga catgaaaaac ccagtgagtt tttattgaat agtctctctt gtgttaaaag 60
tacatattca ggactatact atgttgattt tggaaatatt ctgatgtgtt taatacaaat 120
tcgtagtgta ttcagagcat tgtatgtgtc tcaccaatgg tacacatttg gattaagcag 180
taataaggcc tataaaagaa gaaatgaaac aatagttttc aacaataaat gcaggaagaa 240
aaactgctga tggacccaac tgagaaaatg tcctttttaca ctatcccttg gtggtcagtc 300
tccctgaatc tgggtgtgctt ataattgctg ggaaggcagt gtaaacctgt ggccatttct 360
atgcatgtct gggaggacca cagccctggg gtggagcact gacaggtttg actttccacc 420
agaattgctt gctcagctta atcccataat attcctttcc cttagatttg gtttctgnct 480
cggtaacttt ttctctctgc atataaaatt tcatggctta aatactttta agtcngagat 540
tggnttt 547
```

<210> 8349

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8349

```
cattttgaaa aagctattta ctttttttcc aaatattatc ccaaataagg gttttacaga 60
taagggtcaa tacgaagtca aacattctac agaagaaaat cgtttttaca gacattaaga 120
ataattttta cagaagaaaa agctcacatc tatctagatg tggctatgtt ccatgggaaa 180
aatttcagca tccaaagtgc aaagaaaaaa tgactgtagc ttttcttacc acaaaatatt 240
```

gacaatcttc ccttatagcc tactctttat tgtagttgg gatgccaaag gatgatatat 300
 tgacctttag aagttagggct ccactggaca aggttagggg tatgggggcc aagcatcaga 360
 atgaattcaa ttttaaaaga aaaactggct ttgaccccaa atgaacccaa agttcagcca 420
 gcggcacatc agagataaat acgagttgta ctttcacatt tacaagggtg tgccctcaac 480
 actattaaag acctaatacat tcaaatcaaa gctcccatct tccattacta ggtcttgncc 540
 caaagggatn c 551

<210> 8350

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8350

ggggctatat ttacaaatit tattttttta tcccaaaaat acatataaat gaaaacctgc 60
 tcttcaaag caggagggcc ttgcctaac attgtcatat gaaaatcagt atcagctctt 120
 taacacacaa tttacatata tacatacata cacactatat gtaagcagca aatactttgc 180
 tacttacaca tattcctctg gtggaaaact aggacactgg gaaattcccc tgctttccaa 240
 ccttggaag gtaaatacaa cctctctcaa caacttttta aaggatgaaa tgtgtagaaa 300
 catgtaaaca acacaacctg ctttagatct atacatgtta ttagaataaa gaaagaacgc 360
 tgtcacatca gtgacagttt atttctcaaa gaaaaaaga gataacattt gaataaaaat 420
 gcaaaaactga agtacagtta atatgatcaa aattgttgtg tcatgctcca tggagaaatc 480
 angaattctt tnccaagnac agattcccaa gncnatttca ancactttgg angctgaatt 540
 a 541

<210> 8351

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8351

```

gatgcacaaa ggttttaata ccttggcttt aatgattttt caaggttaag aaacaaattc   60
aaattggttg gagcttcaac tcagtaatta caatcacaaat gcatctctga aaggccctgc  120
atttgagggc agagtaatct gcaaagatga tagtttttac atatgtcctg ttacctacac  180
caatataatt actacattat cttataaaga caaacagttg cttcaaactc tttaaaaaat  240
atatatataa tgagtttccc aaagactcga gtctatattc aaagatgagt aaaaaaaaaat  300
ccattacttc cctagggtca ctttcttcct ttactcctgc ttaaatacaa aagctgatag  360
tttctgattt gtagaaaaat ctaaaggttt ctgcttttta gacaaattca ggttcttttt  420
tgctttttct tcttggtttt ctgtttcatc actttcatca accacacggt ttcgcttctt  480
tgcttcagtt ccttcacttg gccggttctc ctttggcttt ggtagccac accctttctt  540
tctttaagtg acaataacct tnaa                                           564

```

<210> 8352

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8352

```

cagagctaaa cacagtaatc atttattaat tcttgagaac cattatgaat catataatag   60
tttaaaagag attcaggatt accactttca aatatatcca ctgacgcttc caaagtagtt  120
taatgaatga ataaacctat ttgtttgtat ataaatggta tacttggaag agctcaaaac  180
ttttgtatta cttatatgtg cacatacatt agacacttcc ctatcatcat ttttactccc  240
ttttttctta gcaagccctt tctttccaag taaacttcag tcagactccc tctggctgcc  300
cacaaatcct caatcactgt tggccatga aggtttactg cgttcattta ggtgctcact  360
cctccctgag gctcattccc tcttaaaact tctgagcacc ccggaattac tggccccatg  420
tctctctctc tcttttacca agacagctgc tgaggctgct gctatgcagg tctacctgcc  480
cctntctggg cctctgcttg ctttacacca atgnccctan cccaggtggc agtatctggg  540
ccccccatt tt                                                         552

```

<210> 8353

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8353

```

ctttaaacct ttttttattt agagattttt ctggttaagga gatataccat aggaaagcaa 60
tttcactggc agtgaggtat gtatatactc taccaaaata ctccttattt taactgtttt 120
taactttatt tacatacgaa gcaaagaatc aatgcataatc cttggttcaa ctatagtatt 180
agccatacta catgaaataa aatggtgctt gcatacaaaa acttgttggt tgtaaaggaa 240
tctgatttca gattaaaata cctaattgtt ttgggaaaaa atttttaaaa agaatacaca 300
tttatcatga ccaagacacc tgcaccatat tttccattcc tcacagcaca tttatttcag 360
taatcctggt atgtcgggtc ttagcatgag catagtgtta cacgatttcc gtacatataa 420
tcacatccaa aacaagctct aaaatttaaa ttgnaaacat tctcatatgt agaaatattt 480
taatngggna ttaaggtttg ctaactggtc aaatttggaa gatatttaat gngacgttat 540
ctnaactggg naggg 555

```

<210> 8354

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8354

```

caaagagtga aatttattta ttggaattc agaaattcca ggttgtatga catcagttac 60
tcaataagtg tgaattctcc aactcttctt ttaatcccat tttagaattt aatatagaga 120
tctctgattg gcaggaacac tagaaataaa tgttccatgg ccagtagtgc aaatggggga 180
ttgtaggttt tgaaaaacca ccctaagcca tattaagggg gttggaagaa ccatcgaagc 240
ctaaggcata gaagaaaatt tggggttaag aaagatgaag aacaaaaaac agctttattg 300
cttatacatg accaagaaaa ggaaaacatg gcaaaaaaaa aaaaaaaaaa aaggcaagat 360

```

gtgtattcct tgcaaaagaa caagcctgct aacttgggag gaagggaagg tcaggaccca 420
aatagagcca atttcctgga natggcctgt tctactggca cattttcctg agctgggctt 480
aaaactttca gggccttttag ggcccaaac catgctgcta aaaatntttg gccaaagtct 540
ttcacaaaaa at 552

<210> 8355

<211> 244

<212> DNA

<213> Homo sapiens

<400> 8355

aaatttgact cattcaaate ttggcaatta gcatgtatag tatgttatga gagagagaga 60
gagaaaatta gcagaaatgg aggaaaacat attacatcct aaataccacc aaattgccaa 120
aatacacatt tgggtagtaa tctccagaga actctctgga ggcacagcat ctatcatgct 180
gatttcctg aacaatatta cagaatagcc ctgtgtactt tctttggggg ggggagggnnn 240
nnnn 244

<210> 8356

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8356

aaacaggaac ttaggttaat ttaatagaaa aaataaaaata tggaataaca ttgattttgg 60
ccagtatcag ttacaaccgt tctactatat tttaaaaaa aacaactgaa cattttacac 120
ttgtacagta tttttcagta aaagnggatt tggatttaac aatgggtcac taattgaaaa 180
taaaaagaca aaagaaaaca gaaataggac ttttgtctnt agaaggtag agcatttggt 240
gagtctccaa actttgnact atccattaca tatactctcat tatgaatata tatatttatn 300
cntaatatat aacattaact taaactttga aagcattatg ttctagttaa taatgttatg 360

tagataaatg aggcagtaac acactagtag ttaaaccagt atttccgnga cgtgcacctg 420
 catggtcagt gggaaatgga atgcacgctg gtagacccca gtgaaatttg gtggcatggt 480
 gatgggtant ccgntccaaa accggcctna ttttancitt ctatnaatcn cggna 535

<210> 8357

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8357

gagacagagt ctctttctgt tgcccaggct ggagtgcagt ggcacaatct cagctcactg 60
 cagcctccgc ctcttggttc aagcaattct cctgtgtcag cctcctgagt agctgggatt 120
 acaggcacat gccacaatgt ctggttaatt tttgtatttt ttgtagagac agggtttcac 180
 catgttggcc aggctggtct tgaactcctg tccctgcccg cctcggcctc ccaaagtgcc 240
 gggattacgg gtgtgagtca ctgcaccag cctaagttgc tcttttgaat cacctaattg 300
 cttgtagagg agcaatggan gggcacacaa gaggggtaaa gcacagagaa catttcagaa 360
 aatgcaggaa cctttctttt gaggcacaac ttttgnaca gggcaacccc acccaaggag 420
 aaaccagtca gagggcccaa ctngaagctg aatgaaggac gatccctntn cctggcctgg 480
 ggagcctggg gtcaccttgc agacaagatg gtccaggaat ttactntga ctnttggttg 540
 aatgagcctn ttttacgggg ggg 563

<210> 8358

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8358

caagtgtagt cacagtttat ttctgatgtg gctgaatcta gggacaggcg ggctgggctg 60
 agtggggggc gtgtcggcga tggggctaga actccacctt gcaggccggg aaggcgtcat 120

cctgcatgga caccatgctg ttgctgcca acaccgtgat gccagcgcc tggatgccggg 180
 cgtgcgtctc tgcgtaccac gtatgcatgg ccaccgagtc gaaagtgggg atcagggtca 240
 cctgcaggtc acggteccaa tgctgcttgc tggccagtag cgcgtccagg acggcccgcga 300
 tgccttctc cttgcgctgg tcctggccac tgatgacgta gcagagcgcg cgcacgcgct 360
 ggaagaactc ctcatccacc aggtgggcgc tgctcccgtt gggcaggtag gccagggtcca 420
 ggtagaccgg ggacttgggt ggggtggctg aaccccgcc cggtgnttg cttacccccg 480
 acggcctnga atggcaatct tggggggtta ngactttntg gaaagggtgc ccggcttcct 540
 tttantgggt tanttcng 558

<210> 8359

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8359

agggaaaagt atatttacta gacttccata atccatactt actttaaatt caatctagaa 60
 ataacatgac tcatattagg caatatactt tgaagatctg tacaacatag taatcacagc 120
 aggtcttgc taactcacia atttagcata catgctgcaa aaacatctct cctggagtcc 180
 caagggtttt caaatgttcc accaggggca gtcaagacta gattcacggt gctctcttca 240
 tcatgcgcac aaaatgtgtt tccccataac accatattat cacaagtcta tgaacaattc 300
 tggtagcta aggtaggcag tatagaactc ttacaaata acagtatttc aattatgcc 360
 tgtaagtaaa caatttgcgt tgaactgtcc tgtgtatcta atcatttaac acattgcttc 420
 tataagaaaa tactatttgn taaatttttag tcataatttc attggttctc atcatagact 480
 gcagatgcc 540
 acattaatgg ngaaccaaat ggtaaatctc aattttcttt gacattttat 540
 gctttggaaa ttcanaan 558

<210> 8360

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8360

```

ggaaattctt tacangaaat tttatttgag atctcaagnc cttataaaaa gtgcattaca 60
tcaagattgc aaaagacact ttttaaata gagacttcta tctactcatc cattttaccc 120
tatgattcat ttcctaccct aacagaaatg atgaaacagt tttctttct tccttttctt 180
cctcctgctt tgaaagggca actgtcatga gggatatctt aacagaatgt gccaattaat 240
ccttgccagg agagcagtag cttcctactg gctaaattta gagagccctt ggcattcctt 300
ttgggtgtggc tcaaagatta ttacaagctg aatctaaaag attgcaacct actacttgca 360
atctgtctcc ctgggctcct cttttactna caaactccac tctaaaacaa ccttaaattt 420
taagcactca ataattgctt tagaaatgaa gggatctaaa ggtaattacc ttacccttgc 480
aactattttc tgnataagaa tcttcaaagg tnataaaaat tntccgatg aagaatggcc 540
taatcctaaa anggggtgga t 561

```

<210> 8361

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8361

```

agttagaacc agaactttat tgtagcggat acactttctg acctatcatg agtatacaca 60
tctgcgaagg gaaaccgcgc ggcgacagcg tgaggacatc ccctgggcgt gagcgtctgt 120
ccgctgtcta aacagagcag ctacagggac gggacatgga ggatggccac acatagcaca 180
gccaccagtg tcctcagaac tagcagtcag ggtcacagaa cagtattcaa aatgattgcc 240
cacctgtttt agaaatctaa aattttacat gtaactaaga gcaaagtgt atgtgggttt 300
tagaccatga ctgtttgttt gctctcctgc cctaccacca agcaaagcag cagggtcct 360
gggggagagg gatttcaacc cccctgatgg caggggtgc tctggggagg agagaggaga 420
gaacaggctg ttttgggaaa attccagcac ttgacttcg ggccatgcgt cttnctgtg 480
acgttctgag tacggatcgn taaggcctct ggccgtttcc aaaaggagt gcaaccggt 540

```


tgagggaacc tnttaa

556

<210> 8362

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8362

gtgattttga catttattaa aaagtatttg tcatcagtaa ccattttgga tacttgcaaa 60
tattacagta aaactctgcc ttaattcaca gggcaggagt agaaaatcaa ttatgtaaaa 120
tacagtgttc cttttttgca acattaacca gaaacattgt ttatcagttt gtactgatat 180
ttaaagtgca cacatgggta catatacaca cacacaaagc taaacttcag cagatgggtat 240
aatgtataga gaccaaactg taagaaatgc agcacatctc tgctcaagat ggaacaaagg 300
gtgggaacta accccaatag gggtacaatc aaattaatgt tatttcagat catcataatg 360
cttattgttc tacatttcaa atatctactt gaaatgattt tattaagatt acttgcagga 420
tttctccttc aaatcatttt aaggttttaa aaatgcctta aaaatttcaa acctttanct 480
ttacatcttt aggtanttag caaaagtnc tngcccctac atgggttgn aagnnccaat 540
ttggaga 547

<210> 8363

<211> 462

<212> DNA

<213> Homo sapiens

<400> 8363

cccaaattac caagaacctt tatttaacct accaaactaa aagagcaata aaataaaaaat 60
attttccatc cacaaaacgg ttttacatca actacactga ccaatacaga gaaaagggaa 120
atccctgagg aactgccaac aataaataat atacttaaaa tagaatgttc tgagtgtaaa 180
ggaacatttc ctgagcccgt tcagtttggg gaaatttggc cctttgcaaa attcagtttc 240

tcaaaaggat atccaactga tgcaagtttc ctgtcatgac aagaagctgt catgttcagt 300
 agcaccttac acgaaagggtg gggaaatagg ccgggcgcag tggctcacgc ctgtaatccc 360
 agcactttgg gaggccgagg caggtggatc acctgaggtc aggagtttga gaccagcctg 420
 ccaacatggn aaaaccctgn tntntnctaa aaatncnaaa aa 462

<210> 8364

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8364

agaacaaaat ggttttaatc aattgcgtca ccctcactct cctgggagcg gagcaacaaa 60
 aaggctcggc tcctgcccc agaggacagt aaggcttatg tgtctctcca cactgcaggg 120
 cccaggctgg gcaggcaggg ggtgggaagc aggacagggg gcagggaggg aggggtgggag 180
 gcagggagga aatggcaggt ggctggaaca caagaaagca aaggggaccc agctggtcct 240
 tgggccccag ggcccagccc caatactcct gctctccctt ctccctggct agagaaaggt 300
 cacggagaag agacagggga gcaggctcca gcagcaggag aagcagcagc agctgtttcc 360
 ttcaccaata aatatacttc attaccaagc tagaagagag ggggtgggaag agggactggg 420
 gtgggaagga agggggagaa actgccacct gtgttgctgg gattaaagca atgagatggt 480
 gccaganccc ccaccactat nctaaccttc anttggttn ttnaaactgt gaaaaanctt 540
 tttaaattgg cccccttt 558

<210> 8365

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8365

aagggtgaag aggagtttta tttagtgtta gaagagctca gaggagtggg tagctcctct 60

ctggagacag attgtcccat gagctcaatc attcagctct caacagagag gagggccctgg 120
 agagagtggc tcctctccgc aggcaagtca ttccaatgtc tctgcaggtc tctgaagctc 180
 gcagcagagt gtagctcctc tctgctggca ggtgggtctct gtagctttca gcggagaagg 240
 tactcctctc tgtagctggg caccaccacg tctccagcta tcagcagaga ggggtactgct 300
 ctctgcagct gggtacccctg tcccctcgtc tctaccatct tcatcctctg gctattctct 360
 gcgctgctct ggctgagcct agggttttta tggacctcag cggggaagaa gtgtgtgctg 420
 attgggcat tggcaggccc anaaaaggct ccacgaagtt tncactctgg caaanggact 480
 ggcanccac cccagaatt caaggccctc ctggcctgaa ggtgggggnt tactggggac 540
 cccanccctt cttcctgttg cant 564

<210> 8366

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8366

cagacttta agtttttatt attttatatt acgcatgac ttgcatggaa tgaccacaaa 60
 gtggcataac cttcctgggc atgtaactta actcatcagg cctggctaga aagtgagaac 120
 tcccagatac acaatttagt ccaccagaaa catgggaggg agcaaaggaa agagaaagag 180
 acagaggaag gcacaatgat aaataattat ctgcctcttc tctaataagg tagtggctcg 240
 ttctaataat gatgataatg tcattgaata caatctctga ttcatggta aggtcttttt 300
 gttaaaggaa aggaggtttc ttagaaggac tggatctaata caatacatat ttgatgttca 360
 aatgtttgac tttaaaca aattttttaca gccaaaataa aatgaaagaa atgatactga 420
 caagctctct tgccatgcc ttgtcaaagc acccacagaa agaataagt caaaaggtag 480
 aaaggccctt cccttcatcc aaggaaacat ntncatggga gtntgcagc cgacttcctt 540
 tccntaccca accccacacc ttaggtca 568

<210> 8367

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8367

```

gaaataacat tgtgacttaa aggatttcta ggtcctaaaa tctggaaaag ggatctggaa 60
aaatttggac tccatgagta gtttggattc aatctctctg tgcttttttt tttctttata 120
acaggaatgg gatgggggggt ggggggaata aaacttctta tgctatatag gtcattgtact 180
gtgagaaaca agaatacaaa actatgggtt taaaaacaac atatacagaa ataatcgcca 240
atctctgtct acctccacat cattntgtca tagaagttca ttgtgattaa aaagttttaa 300
agtttttaag agaaaaggta gattgagaag tagaaaggaa gtaggaagga aattgtgcaa 360
aaaaagaaac agtttattag atactctgac cctgggacac actgttcctt tccccaaaat 420
attttccgtg ataggaactg aatttaaaat tatcaccttg gtagaattgc ctggaagatn 480
cagcaactaa aacctggatt aatgccact tttttaaaaa atgccatta actnttaach 540
ctggcngaaa aatggttaatt aatttt 566

```

<210> 8368

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8368

```

aaattgcaa tttatttttc tacccaatcc agtatcaacg atatacaaaa ggatataaac 60
agactatcat gaatattttac aggatgacac accaaacaat taccaaggaa caaatcctgc 120
aaagtaacaa attgttgctt atccatgtcc actcaactgt acaaggttta tttctaggac 180
aatttcccag ttctctggga aggaagttct gtggatttat accttcata agggtaaac 240
aaacatgcta agagctgata ccatcatgtt tttatactaa cagccgagaa aggcctttta 300
agaacactct ctttcaggcc aatgttacag cattagtggg ctcatagaca ggatgtgact 360
tcatcaaagg aaatgcttct ctctcttgg tctccctaan gtcctcctcc tagtacacag 420
gaggagtcc ccataataac accctgggtt ccaacanaat ggnggggtag attatcaacc 480

```

ccncaatggn gaaaaagaaa ctggaccccc ttaccttacc aaatccattc cagaatctgg 540
gggaggcagt ttncaaaatt tttacaggn cgaccctttt n 581

<210> 8369

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8369

gagattcgac cacaaacagt tttaatggtc tggttttctc cctagttccc caactgtttg 60
ttagtattat tattactaca agaataaagg attcctgaga gcctgtcccc tcctctcctg 120
tggccccctt gacaggactc atccctacca accccccacc ccccgcccc ggatttctgg 180
ggaaaaaaag aagtgaaagg cactgcaggg gtagggggct tgagtgccan tgagttgggg 240
ttgggcgggg gcgggggcgg tggtagggcac tagggcaggg cccggcctag aggaggaaag 300
ttccagtcca tgcctgaagg aattgtggan aggtgtgtcc atccatgaca ccccatcag 360
tccttcctg aacctgtcta ncaggcntac ctaagtccca tntcccacc cccaggccca 420
cactgggggt tctgnagcag gagcataaaa ttaattagtg ttggctcaca aaggaggaat 480
gganngtcca ttntattgga cttcaanggn caaaacccaa agggagggtg caaaaaacta 540
ggataatcct caaatgctct tntnttaa 568

<210> 8370

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8370

ccttcatgag atacttttat ttttatctct ttctctactc atgtgcttaa ctggtgaaat 60
gattctgtag aaatagatcc ttctgattct gcattctatt tccttatggc aactacaaca 120
ggaggaatcc agctggaaat gccactaacc ccacaatcca gcacctgaga gaggaagcca 180

gtcggagcgc cgtgctgggc tcactcactc tggcctgcgc actgggggttg tcacatccat 240
 tttccactgg ctatggggaa taatatttgg ttaaggctgt tgaagccctt gcttttgagg 300
 ttttacatta tttggtaatg aaagccgttt tttcttcctt ccccaggctt atgtgaagaa 360
 gccacgccc actctcaaca aaacagactc ctccttggga agcatctcca gccctgggac 420
 agacacctcg ctgcgactta gggagggaca ggattagccc aggaataaaa gcattttaga 480
 aatggtttct gcaccttcan agctcaacaa ttcttgnacc ttttanatgg aagggatcna 540
 aagtgaacana acctgttttt 560

<210> 8371

<211> 450

<212> DNA

<213> Homo sapiens

<400> 8371

gaaatgatct gtctttatta tgtcatcaga aaacaaaaaa atcccccgag tgtaaacagg 60
 agaaatgtgc tggttaagtt actcatcatt atcttattat taacaaaata aagcactatc 120
 tatgtttaca gtcataaaaa aagaaacagc ctggagagaa gtgggggctt tgaggatgga 180
 gagaagacng gggcagacac agactccaca tctggccctg tgggatttgg ggttcccata 240
 ctgatccaag ggctatttag atcttcagag ttaggtgaca atgggatttg atttccttag 300
 ggaacaaact ttgtgaaact gatcagaggc tgagatccag tccctagtat taagtggggg 360
 aggtgagggc aggnaatgtn aggggctggg ctgggtntta gangctgaan cccaggantc 420
 ttttcacctc ttccaagaat ggggcccccc 450

<210> 8372

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8372

acttagaata tttatttatt ctctgacatg acaagacaca aaaagttaca acttcttaaa 60
 actcttcaaa agaaaaaat ataattctgt aagcagcagc agcagcttcc aaggttctga 120
 tgtgacgggt ggggcagctc ccaggagcaa ccgtgaactg ggggggtcca ggcctgagcc 180
 ccaggtagtgc tcgctgggaa ggggcctctg tggagggcc cggttttggg gacacagcac 240
 cagcacatca gggctctgtca ccaacacgat cacatggcca gggcggggca gggagagctt 300
 cggctcacag cagggatcgc ccggtggcag gggggatggg gcttctgaag tgtggtcagg 360
 ggccttatgc ccggaggcgg gaaggatggg gcttctgcag tgtaccagcagg ggccttatgc 420
 agaggctgaa aaaggagggt gggccctgaa aaggacttgg ggggtgtggca acttctggcc 480
 ttccttcana acaaggcaag cacccttaag nttcacactt gtcccaatgn c 531

<210> 8373

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8373

ctttaaagtt ctgttgttta ttttacacaa aggagaccac caacatttgc cataaattct 60
 tctaaactct ttaagaaggc catcttctgc ttccgatcca gcgtaggagg agtgctgctt 120
 gcagtgagct tgttgaaggc atctgctaata ctctggtaaa taactgggtc ttgctgactt 180
 gatagtaatg tttcgaccag ttcagaatat tcagcctggg gcaaacacac caacgtgtag 240
 aaagcttcgc cagccgcagt ggtcatctct gtgttgtgct tttgcaaaac cagcatatca 300
 aaaaccagct taagaaagtgc ccgtgttgct agaaaaagtgc gtgagtctgt ttcttngct 360
 tttgcacact gttcagctaa cgggtgtcaag gcctncaggc aaagctggca aaccttcgaa 420
 ctcatgatg cattcctaata tctagggagt acatcagact tttnaacaga tcctcangaa 480
 acttggggan tttttcaggg aaaatttccc cgattaatgn gnnta 525

<210> 8374

<211> 521

<212> DNA

<213> Homo sapiens

<400> 8374

```

agacttttag aaaccttggt tagtcggtaa caacattcag tagataatta agggaaacaca 60
ctgcacaaat tcatttccca cttagcctga ataagcagtt tgactactta atggtttctt 120
attgtaagtt ttcctatggc cagggaacac agctttgtaa gtagtccatc tttctaaaac 180
tgaggtaact ttctaaacat taaaagtctt tagtaacata ggggaaaaat taaggcttaa 240
ttacttagaa aacaaaatat cacaattaca gaagcacatt taattacaaa aattataaaa 300
ttatattaac tataatgtagt ttttaatatc tagtatcaaa ataccttttc tacttttgta 360
actaaatfff tgagattaag aacaaactag ttcaatcatt ctacataca aaaatttcat 420
ggttatatff attaaaaacn aaataatgcc aggtctggtn aaggtagcat ttttccccag 480
ataatatng gaatgnggga accgaattgt aaaattcaat t 521

```

<210> 8375

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8375

```

gggatgggaa aactttatta ggtttggttt ccagcttcgg ccacgcgggc tccgcccgcc 60
ccgagctcgg gtcacggggc gcccccgccg ccctcctcgt cgtcctccac gtcgaggccc 120
gggatgccgc ggatctggcg ttgcagcagc ccctcccagc aagggcacgg cgccctcctc 180
ctcctcctct gggggcgggc gcggtggcgg caacacggnc ccgggggctg gctctggggg 240
cacgggaggc tgcgccggca cgccctctgc accctccgag atccctgccg gttcgccctg 300
cgccccctcg tccagggcac cgnccctcagc ctgctcctgc tctttctctn ctgggggctg 360
tcggtgaaag ggntctcgcc cttcaggtaa cgctccagct tnttgctgat gaagcttggt 420
gttgagaata ctggggggca ccatgaagga ggactttttg gactggtcca atatgagcct 480
nccgnttccg gttgggaatc catgggcttt aaanncttnt ggganna 527

```


<210> 8376

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8376

```

aaagaaaaac aaaaagaact ttactttcct atgttaatac aggtcaagag accctttcct 60
ctcaaaaggg ttggtaacac cagttcttag caataaacat aaggcacttg tttagattac 120
aacatcactc ctttttttcc acttggtttt ctaaccctgt ttttcccca cagtatcatt 180
tgaaattaat aggatgaatg aggcaaatac gagacgatcc agttgatact actcagagca 240
agatagtaca gtacagtgtt tcaggggtga tgtctggaca taaaatgaac ccagtcaagg 300
tcctctgaca ccaatgtatc cactatcaag taaacctgaa agaaaataaa agattttattc 360
aatagttcca gtaaaattgg gttggaatac aatacacatt aggaatttag cttctcacgg 420
gtggnatctg catcttaaga ggtctgagtc ctatgaatat tcattcttag acaattcatc 480
ttttggacca tttnaggac caattaaang aattcatttc aatatac 527

```

<210> 8377

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8377

```

actgtgaaaa gtttatttgc atcgattaat tccttttttt caccatcata agagatatgt 60
acatttgttt gctatttgtg atcagagaaa agacattttg gaatggataa tctgtttcta 120
ccattcttta aagaaaaaag ctttaaaaac aaaattcaag tgcaaaaatt tccagtagtc 180
ttcctacctc cagtgtaccc cagcaaaata ttcatactgt tgctgttagg aaattaatca 240
accataagct tcaattaccc actttttttc ttccctaagg tgtctgtact tatgaaaaca 300
tatatagcat attcctgaaa gtataccata ttcctacaaa gtaaggagc ctagaagcaa 360
cagtgatcac tgcctttcag tgtctccaac cccatgtaac cactgatagg ataattcagt 420

```

ctctaagtca ttgatctac ccatttccta aatacagcga tcaacttcta ttttaacaaag 480
ctagtctggg gttactaaca cgttccccc aaatcaatag ggcctg 526

<210> 8378

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8378

attttaatca gatatacaatt tattatggaa ccattcattt tctgctcatt agcactaaac 60
atTTTTTTtg ggtcaagtat ccatgtcata ttatgtagaa aatggtcctt catgccaaaca 120
gacttacatg tataaaacat gaacaccccc aaactctggg gagtattcca gaatggggca 180
aaagagaggc tgggaagtac catttactac acaaatgtaa taagatggac agaaaccttt 240
attagagttg gaaaatcaag ttggaaacaa acacatgagt tcactactta atgcatttaa 300
ttccaacccc tcatttgaat catcttggtt acatttaaga ttctacaaca gttataatgc 360
gacgattcag aggttggtctc aaagttgtta cagtgttaaa aaaattatag taagcagtat 420
aaaattcaat ttattatggg gccagggggg attcacaacc attctttaaa accnttagag 480
ccaaccceng gcaagccttg nggcttacac cctgnaatcc cagacttttg g 531

<210> 8379

<211> 401

<212> DNA

<213> Homo sapiens

<400> 8379

catggcacag agtttaatgt gaatcatgag atgagacaaa agcctcctcc agggcgatgg 60
gaagacccag ccccaaacca gactcttgag cagcagccc taaaccagac tccgggaagg 120
ggctgcgtgg tcatgcaccg cctaagactc agaggtgaag atgggaagac ccagccctaa 180
accagactcc tggaaggggc tgcgtggtca cccatgcctt aagactcaga ggtgaagatg 240

ggaagaccca gccctaaacc agactcttgg aataggctct gtggccaccc atggccgtaa 300
 ggctccggga tggagacagc atggacaggg acctngcaca aaggcatgtc gggagggcct 360
 cctttccaag gnanagnccc acctgntcct tntaagcccn c 401

<210> 8380

<211> 493

<212> DNA

<213> Homo sapiens

<400> 8380

gaaagtttta tcaaagctaa aatttatttg gtgcatactc ctcttgatat caggtatgtt 60
 cgcatatacc tttttctttc atgtgtaaaa acaaccatgt gaggtatttt acaggtcaaa 120
 agaaaacaaa aactacttcc ttattcagtg taaaggaggc ttataagcat tccaaaataa 180
 aaacaaacaa aaaccagaca agtacatagt ctattttccat ttccttttat acatcctctc 240
 tatatatcac acatttagca ataggagaat agagaactaa ttcaaatgca agggaatctt 300
 tttttagat tctgttgaca gatgctcttt aacctaaaca ttttctactc taaacataac 360
 ggacttaatt gncctcagta cgtgaaataa ttttaaggng atctagtact ttgaaaattt 420
 cattcactta agaacactta agctggaaaa tagcactatt tttcagangc aattctnaac 480
 ngnaaaangn cat 493

<210> 8381

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8381

ccagacaaaa tgtatttatt tatttttttg agacggagtc tcgctctgtc gcccaggctg 60
 gagcacagtc tcggctcact gcaagctccg cctcccaggc tcacaccatt ctctgcctc 120
 agcctcccaa gtagctggga ctacaggcgc ctgccacat gcttggctaa tttttttgta 180

ttttttagtg gagacggggt ttcactgngt tagccaggat ggtcttgatc tcctcgtgag 240
 ccgcccacct cagcctccca aagtgctggg attacaggcg tgagcaacca cgcccagctg 300
 tcagacaaaa tttttaagaa aacaaaattt ttccagaat attacattac aaaaatcaat 360
 gaataaatga actacactgn aactttaata cttattccat atgaaaaacc aaactgggtc 420
 tggcaatttg attgatctct tgagaagttg cagtgcattc attccatggg tnaaacccgg 480
 tggtaggcat tggcgntnct gctgctgggt gaatggcttc tnggcttggt tgttggtgga 540
 aaccaa 546

<210> 8382

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8382

gctttcagga aaggtttatt gtggtgagtg ctttctgtac agtcgactgc aaatgaaacg 60
 cagaggatgg gtgcccagaa gcacctgcgg cagaggcgca cgggaagccc ggggcccagg 120
 ctcatgcaac acgacgctca ccgcggtctg ggccgtgggg ccgtcagaga aaccttttta 180
 aaaaatggag atgaatgtta cagaattgga caaccogaac tgcttttcaa aaccagagga 240
 aggaggttct tagccgttac tcagatacca atgctgggga gggaggcctg acttcagcaa 300
 cagctgtggg tgggctggag gccggcgag cttggggccc cccacgccag cttgtctnaa 360
 ccaccacctg tgcggggctt gcttcnaagg gtcaacaaga gcaactgatg gcttgccact 420
 ttcangcccc gagagacaag gcttacgtac ttacttgca gccaggtcc aagcccntgg 480
 aaggggtcct agctccgttg aattctgnat nccaagtggg caccttgagg aanggtcttn 540
 aaggaangct 550

<210> 8383

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8383

```

gttgcttaca agtagtttta ttattaattt tagagtaaac atcaccaact tgggcacaat   60
tccaaaatag agctcttggt ggattctggt cataaaattc tttttaagc ttgttaagat  120
cttataaaat aagaaagttt tccaatact ttagaaaaat tactaatcat taataagtcg  180
atttataact caaagtaatg gcctaacatt ttgaaagatg aaacaacgct cctcttttga  240
acatctaagtg tattaagtaa gctcagtgtc ccaggcttca gaggagacag agaagtcctc  300
atattgcaac ctgaccagat gactctggga gtgaattaaa tgcttaaaag aggtcagtct  360
tgcaaattcg atgaagcaca gaatacaggg gaactgatct gattctgata aaagatacat  420
tactctcaga aaggggtgaa gcttaaaatc ttgcagttct tgggcaagga aggagtgcc  480
ccaggcaggc accaaccggc ttgaaaggaa aagcttgagt gaattcaagg tctattggga  540
gang                                                                    544

```

<210> 8384

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8384

```

agatcttcct tcagactctg aattaagttc tggttgtag tcaaagatgc atttgatctt   60
gcaatttcag cttaagtct accaatttct tctgtcaatt gttgaatag cttagtatga  120
acttcctttt cagaaaggag cttccgatat tcttctgtat ctggatcttt ctgttgactt  180
actagatgct ggttacgtgc tttccaacgt ttgacatcct cttctaagag cttcttctct  240
gcctgcaaca taccgctttt ctcaactcagc tcagcatttg cttcttgtaa gggtaaaata  300
tctaactcca gtttctctac ctttgcttgc atttgctgna gatcctgntc tagtctctcc  360
ttctcttctc ttagcatttt attggntctc ataactacat tcaactggttc aggtttcttc  420
atcagntctt catgctgagc cattggtttt gcaggtaacct naacatttca aataaatntc  480
cttccaacat ntaccaatag gtgnaagcta cccggtccta tgagctcaaa nctc       534

```

<210> 8385

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8385

```

gaaatgttat gcagtcattt tttaaatgag gtaaatttcc atgtattaat gcaagaggag   60
gtccagaata caatgcaaag tgaaaaaagt tgcaaaacag tacatataat atcccatttc  120
atttaaaaaa aacctatata caaatgtgtg ggtattcata tatgtatata tgtgtatatt  180
aatatataaa cacaaacaga acaacatctg ggaagacaca caccaaatta agttattcct  240
ggagaatggg agtggtgaga gggactaagg aaaaatcttt cactttttac ttacacatt  300
tatgttttgc ttgaattttg ttggctaaca ttaataattt ttgaattttt atcacaataa  360
aacattttta caaaataggc acttttgtaa tcagatcaat agagttataa tgnatgtgtt  420
ttaaataaaa atagctccat gggggctggg ccgtantggc tcacacctgn aatcaatccc  480
aacactttng gaagncnaag gnggccaaat atccggcaag ganttgagaa cagctggcca  540
a                                                                    541

```

<210> 8386

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8386

```

gtatcacgca gatttataat agccgaagaa gcaacataga tggccgtcaa tggacacatg   60
gataaacggg gaatatttgg ccatggaaaa aaatgaaata taggttgagc attcctaadc  120
cccaaatcca aaatactaca aaatccaaac tttttgagta taatgatgcc acaagtgaaa  180
aattcaacat acaaatactt aatacaaact ttgtctcatg cacaaaattg ttaaaaaatat  240
tgtataaaat taccttcagg ctatgtgtat aagatgtata tgaaacaagt gaattttgtg  300
gttagactct ggggtccatc tggaagacat ctcatatgt aaatgcaaat attccaaaat  360

```

ttgaaaacat ctgaaatcca aaacacttct ggtctcaagc attttgggta agggaatact 420
 taacgtaaac ggacacaagc tacaatatgg atggactttt ggtggtaatg gtttttgaga 480
 cagggttgt ctgtcccca ggttgaaatg caangnnca acatggntac cgtgccn 537

<210> 8387

<211> 501

<212> DNA

<213> Homo sapiens

<400> 8387

ctacaagtct tgtttattga aaggatctga aaagcgtaat aaggctttca atgacattta 60
 atacattttc aagaaattaa tatgaaacat taaaatttac ttcaaaaatc caaagttttc 120
 tagatcattc ccatctcagc ctgctttaga ggtcagttca caccttctgt gttcagatga 180
 gcggctggaa ttctgaacac tgccgtcttc cagccctaac gctgggcgct ggtccctctc 240
 tcctaagccc acggctgggc ttcccctgtg cccagggtca tggcggactt naagccaggc 300
 cggctgcccc gaatcacact cagggttttt ggacgctcaa gtccacagat gctgaggtgc 360
 ccagacgagg gtgagcaggg agacacatgc ctcggagAAC gtgcccaggc tggccaggcg 420
 gctgcnggaa gcttcttacg ggcanaggaa aacntcttgn gccttnccta tcgatctcca 480
 gccntgaagg gcaacttcng g 501

<210> 8388

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8388

gttttgtctg tttgtttgag ccagatggag tctggctctg tcgcccaggc tggagtgcag 60
 tggcacaatc tcggctgact gcaacctcca cttcccaggc tcaagcaatt ctccctgcctc 120
 agcctcccaa gtagctggga ttataggcat gtgctaccac acctggctag tttttgtatt 180

tctagtagag atgggggttc accatgttgg ccaggctggt ctgcaactcc tgacctcagg 240
 tgatccacct gcttcggcct cccaaagtgc tgggattaca ggtgtaagcc accactcatg 300
 acccaggtct ccccatcttg atgccttctc ttgccccaca ccatacagct ctgcctggag 360
 cctggaggct ggggtccagag tggctcctgg ctccccactc tnaacaccag gaattcacca 420
 gcccaggagg ctgataagtc tgggaaaact tctggggccc ggctnttttt aagattncat 480
 ctgctgggcc aatgggggnt ttggccactg gagcccggtc ttgccccgn attgccac 538

<210> 8389

<211> 467

<212> DNA

<213> Homo sapiens

<400> 8389

atTTTTgtgg gcatcagata tattctgaag tcaatactaa agctgttaga gtatgacatt 60
 tactaagaat cctgccattt taggcccttc ttcttaaagg acaacaattc cattgggtatt 120
 tagtaaaaaa caacatggct tggtaaattt agctcttttt cttgacattg gcaatgataa 180
 tacaatgcct gtgggtgtata attgtcatgg ctgacttata aatccctaca gatatgtggt 240
 tacttctcta ctttcccttt ctttggcttg ggcaactgcc acgttgatgc actggagcca 300
 ttctgctgca ttcttctcat ccttggcctt aaagacatag gttttattgn ctgtgaagat 360
 ttcgaaagcc ccnnggagaa aacggccctg cgtttcttgg gcacaagcct tnacactctg 420
 gcttttctg agtctattgg gcancntcan ggncatcttt agacttt 467

<210> 8390

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8390

aacacgcaca tattgtttta taattcatga tgcaaagaat gctacagagt gaaatcagga 60

tttgaaaga ggtaatcaaa aaccaaaggt taaaagtggc tcatataact tgaaaatttt 120
tagatcaaag gaatgccact ttgaaaaagt tttacgggtca gctgttaatg aaatgactta 180
catttttggga aggactccta ttcggtatgt agtctgacct cgcctactcg agtagttccc 240
tctagtatcc ttgccagtct ttggcttcta agatctgaga atttctgggg atggggagtt 300
cgagtcacaa tattaagaac tagtttgaag ccagctccag ggtagtctgt ctttaagtct 360
ccactactcc gctccaaggt gactcataag gtcgggtccgt caactctgca ttatatggcc 420
tcaacaacga aattaaaaca catactttta cctccanan cttctttgg caggccaata 480
tgtcactttc ggactgacta ctacctttcc ngctggatct taagcacnt tcaccaaata 540

<210> 8391

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8391

caacgtagaa aagttttaat gagacaaatg tcaaacaagc acatcaactt cttaaaaaac 60
aaagaaaatc tgaaagttaa attacaaaa cacttataca gaaaacttgg catttcaaca 120
gttccaaaca catgtacaca agtttttctt aaaatcagtc agaaataaaa taccttgtct 180
ccctttcctc agctgcttct tgtattttta ttaaaaagaa acaaagaaat ctgtaacact 240
gaataggcaa caacttattt cttgagaaca taaaagtaca gtaatatcta caggtgtact 300
gggaaacatg agttaggtat tgtgctagcc tgtaacttca ttactgcct cctcactgag 360
cacagaggag agaggaggtg gcacagacct ggtctataga tactgacagt tttgnggcat 420
ctgaatccca gccaccagaa gcaggtgagt agctactggg gaaagacagc ntttcagaag 480
ccagctggct aatttgggga aaatggattc ttcctggang gcttttttga aaatttatgc 540
c 541

<210> 8392

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8392

```

gttttttttt tttttttttt ttttttaaac cattactgng actttattat aatagttaac   60
aatatttttag nggtatacaa tcatatcaca attactcaag ctatatacaa acaggtat    120
atataagtct acatttaaaa aagaaaaagc aattaatgac ctcccaaaaa tcacattatc   180
atcaacaaga tttttttcta aaagttacgg ccaatccaat aacaaaaaaa ttcacagtta   240
ttctgcagac attttaaga tgcaggaatt gnattgcaca ttatataatt ataaaccata   300
acaagcagtt atatatatta atctagtttt tcacaaaatt tacattatca tgcaatactt   360
cactgtcaca gaatgatgga actagaacag gttaacttac aaacttttaa ttatagccac   420
aaatttagaa ttattttaaa gntatatttc aaattattat actaaaaaaa cacttcaggg   480
taataaaacn ggcccccatc atnatttggg tcacagatca aaatactttt ttagggggcc   540
tccttgggct ttgcct                                     556

```

<210> 8393

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8393

```

gttttttttt tttttttgat attcaagcat gttcttttat taagcatagg atgcgaggca   60
cagcaggagg ttttaagtaca atgngaaagc aagagaactg agactgtgat tgacagacaa   120
agggattaac taacgtttta ttctctgccc cccaaaatat cctgtgtatt cttaagtata   180
tacgcttccc ttctgcctt tcaaggtatc taaggaatga tttgaaaaat ttgttataat   240
ctctaaagaa ttttttgcac agcattagca aaggagtcta tgacaagtac tttgccacct   300
ggtagttctg cgtattctac tccctctggg tgtcactgtc atcctcactg gctgggacaa   360
ggttctgaga tttgtctccc cagcagttgc taagctggct cagtcttggc caggatgaat   420
gaaacaatta tctcctggat caatgcaaca aggagcatga acctttgctt tttctttcct   480
aagtinggaaa aaggcacccc ccgnttcaat ggtggncctg gtggaactgg attggaacaa   540

```

g

541

<210> 8394

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8394

```
gtcataaaaa tgtgaaaaca ttttattcta tgtacaataa tgtacacaaa tttaaacagg 60
tcaccaaaga gaccagaagt aattaaagag gtatatattac agtagcacat cacagtaaac 120
ggaaaaccat tcacagattc aacattgata ctgtttttgt gcttggttac aactgaagg 180
tgaaggatat tactccattt tggatgaact gaatttttaa caaatacctc aatcattaat 240
aaatgctatt ttcattcagtc agtatcatca ttaaattcct cagctgctgc gcctgtgtgc 300
tgaatcactc catttctttc tctttgaaca tcatcatcac aatctgtact gtcattcttcg 360
ttcaattccc tgtcagattc agcagcagct tctcttacag cttcctctgg agtttcattg 420
ggtggaataa atccattggt ggtagatcat ttgaattatc cctggatata atcttcgatg 480
natactttct gatggcccat gggcaagtat ctttgaatgg tcaggcntht tcgaaggcaa 540
gtgcnttg 548
```

<210> 8395

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8395

```
gacaggagga aaaaaaattt aataatatat gtttgcacag gagttccacg aaatatgaga 60
ctccaagaag ggtcagatga ttgacactca tacaccatcg tgagctatcg aaaagaacgg 120
cagtttggga gttctgcagg gagttgacca cagaagtggg agagtgaagg gaagaagtgt 180
gtcgtgaata aagcttggct ggttttcaga taaaaggctt tgcgagtggc caggtgtggt 240
```

ggctcactcc tgtcacgtcc cagcactttg ggaggccaag gcgggcggct catgagggtca 300
 ggagttcgag accagcctgg ccaacatagt gaaaccccgt ctctactaaa aatgcaaaaa 360
 attagctggg catggtggca ggcactgtaa tcccagctac ttgggaggct gagacagggg 420
 aatcacttgn atncggaagc aaaggttcat gagcttaaaa ccgcccntgc atttccatnc 480
 ccggtgactg tgnagactc ctttaaaaaa aaacgngnga aaaaggtntt tgagt 535

<210> 8396

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8396

gagatggagt cttgctctgt cgctcaggct ggagtgcagt ggtgtgatct cggtcactg 60
 caagctccgc ctcccagggt cagccattc tctgtcttca gcctcccag tagctgggac 120
 tacaggtgac cgccaccacg cctggctaata tttttgtat ttttagtaga gacgggggtt 180
 cactgtgtta gccaggatgg tctcaatctc ctgacctgt gatccaccag cctcggcctc 240
 ccaaagtgtt gggactacag gcatgagcca ccgtgccag aatgttctgt tttgtttgt 300
 ttgtttgttt gttttttgag acagggtctc gctctgtcac tcaggctgga gtgcagtgg 360
 gcaatcacgg ctactgcag ccttgacctc ccaggctcac atgatcctcc acgacagcct 420
 ctggagtgtc cctncacttt ctttcttaag ggcccctnaa ggacatgtca aaaggcctga 480
 gactacttgg ggggaagtct atgggcaagc aggcttgcca naactgaact tgncccttgcc 540
 ctgg 544

<210> 8397

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8397

ctgttacaaa caggtctttg ttaaagatga gaagccaggt ctttattaaa gatgaggagg 60
 gggcaggaaa ggggggcagt gcctcctcta cccactgcct ttgcctgccc ggggtgaggg 120
 agcccctctg ctccacccat gcccccatg atggcacatc tgtatgaggc tgaggcatgg 180
 ggggcagtgt gaagaacagg ggcaggttcc aagaaaaaga agaaaaaccc ttcccacagc 240
 cctaataaat aacagaaggg tttgggatga cctgggcaca ggcaagggga gacacagcac 300
 cctgaacccc aaaacctctg aagtggggca agccctactt aagtagggga ttaggagaaa 360
 gtgggtgana ggtgganagg cccgacacag ggaggggctt anaggaaaan ggggtcccaa 420
 nggcccttgc catgggggaa ccttgcccc anctacagct tggctccttg attcttagag 480
 aagactcaat gacaaacaat gancctatct tccttccttt cctttgacat cttanaaac 539

<210> 8398

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8398

gtagtnacag tttatttctg atgtggctga atctaggac aggcgggctg ggctgagtgg 60
 ggggcgtgtc ggcnatgggg ctagaactcc accttgcaag ccgggaaggc gtcacacctg 120
 atggacacca tgctgntgct gccaacacc gtgatgccc ggcctggng ccgggcgtgc 180
 gtctctgcgt accacgtatg catggccacc gagtcgaaag tggggatcag ggtcacctgc 240
 angtcacggt cccaatgctg ctgctggcc agtagcgct ccangacggc ccgcatgcct 300
 tcctccttgn gctggctcctn gccactgatg acgtaagcan agcgcnegc acgcgctgga 360
 agaactcctc atccaccang tgggcgtgc tcccgctggg caagtaggcc aaggttccaa 420
 ttagaccgn gacttgntg gggttggctg aaaaccngg gccggctgct ggcttacc 480
 ctacgggcct tgantggcaa gtctttgggg gttaaggact tttntgaaa aggggttccc 540
 cggctttnct 550

<210> 8399

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8399

```

aagttttaaa aaaagtttat cagcttagtc tccaaaacca ggaagaaaat atttaaatgat   60
taaaaacaag tatgacctgg aaagatatta gactaaaagg aggaatcaca atgagcaggt  120
gaaaatgtta aaggaaagct ttcaatacac caactgaaaa aggcatctct aattggccaa  180
ccaaattatt cttttagatt attttagcca aataaaaaga aatttacaga tggataactg  240
aggtccacta acataaggta gaaacaaagt ttaagctaaa aattaaatct atattttgtt  300
gcagataaat gtgagattta cctacagcaa ttttctattg atgctaaatt aaaagcatga  360
attgacatcg tctaacagaa atggtttgac agatatattc ttggctttaa aatgttctta  420
cgcatatgca tagaaatgcc atganggata agaataatct tctggattgg ctgtncagtc  480
ataaggcctt tgn cattggt agtaccttcn atggngaata tcagtagggc cattaaatta  540
a                                                                                   541

```

<210> 8400

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8400

```

aacaagaatg cagatgccat ttatttggtc cataagtata gtcgttattt gagttttaca   60
aaacatcgaa tataaataac ctgaaactgt aacaatacac aaaaattggc ttcttacaca  120
gacataccag gcggtacaaa ctgaaaactt gagtaaatta acattgtttt acattaatat  180
acatagtgcc atctaacatt taaaacaag tttcaatgca tagcactcga tacttctttg  240
aatctgtttc aatcagttta gagtatgaaa atggtttagat ctaggctaaa aataattctt  300
cttctagcca aaaataaagg cataatattt ataaccaggt atcaacttta ctaaaccaca  360
atattttgaa actattaatg atacctaagg gtattttacat taaaaggca acatgcattg  420
ngttggttta tctcatgact gggtatgcac acacttggtc aaagggtttt taaaactata  480

```

ttctactttc aatccgcac ctcgatggg ctaacagtct agcaaaatga ag 532

<210> 8401

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8401

agagaagaag tgtattttatt taacatttta aatttcaaat gatggcaaca tgtttaagta 60
gaaagtcctg aaaacaactg actaggtcta aaaaagagaa aaagatcttc aatcttggga 120
tgcgttgcca acacaacatg acagtagatg tcacacttag gtttgcaaaa aatataagca 180
tttgggggttc atttcagtat tggcttaatt taaataaatg tgaaacgagc cttaaaaatg 240
tactttccag tacttttggg atttttcata aatattttag taaaaaagaa agacaattca 300
tctccttttag acagacagtt cagggttaaga ctgtccataa ttttaactat ccctttcctc 360
ccaagtcaca tttttgtttag gactaaatat atcatactct tggcagttcc cttgcttggc 420
tttctcccca ttctgagttt tgaattttct gcatgactgg attcaccctc caacttttgg 480
aaaaataaaa gtttctcact attnaaanaa ggngnattga aatgggatch ctcaaa 536

<210> 8402

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8402

atatcaaaac gtcagattta ctgtataaca tatacagtta ttatttgtca attaaaagtg 60
aaaacaaaca aagaagtagt cacagtacta acattttaaaa cccagaggag gaactcacat 120
gttggtgttt cagttttgac agacctacta ggatgaacta tcctgagagg gctgttgcag 180
agggtgttga tttcagcaag gcatttgaaa tcgttagatt tttttttaaa ggataaagca 240
gaaataaatt taaattcatg ggcacctaag gaagatgtat ttggacctct gtgctgttct 300

ttggtgtgcc agaagcagtt ctatcacttc ctcactgtag ttgaagagtg gattcagtgt 360
 tatcccacag aactcacgtg aaactgggca gtacacaaga gcaggtgttt tggacgtgtc 420
 tcatcatagc tgctttaaga ggaaaaatga taatnaatgc ctgtattncc tgcccatgta 480
 tttttggtgc tnaaaatggt ttttnaaaat ggcttttcct ggggaancta gtgaagtnt 540
 ccc 543

<210> 8403

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8403

gtgttttcct ttttcttctt tctcttcggt tttaaaacaa tatagtgcag actgcacttc 60
 tcacagtaga atataatggt caattttagt ataaaaaaaa cattctcaga gatttgtaaa 120
 tgcacttagt gcttgaccag gccttgagga gagatacagt accgcttcca gagcgccaga 180
 ggggccagga cttgaggact tcgtgagggg actcctgcct atctttccct gccttgatcg 240
 tgtgggacag gccttgaggg gtggtttgca ggaaaggagt tggctctgggc ctcccagtta 300
 aaaccaggag ggtcccaaga gatccctcga agaaggcaag gatgggatct aagattgcag 360
 gccactgtt agccccctgt gtgcctttgt gcgaacagga aaatgacgcc ccttctcaag 420
 atgcagaaaa ttgnnataaa tataccaggt tnggtgaaaa gtggnggctt ccttggacaa 480
 aggggccctt gtgcaatgca cannetggac aactgggtccc cagna 525

<210> 8404

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8404

agaacaaaca ttttattatt aaaataaact tttgtataaa agcattacag atcaaaagct 60

gtatttacac ttatcgattc aaggtccaat tatgcatcaa acattgaata gcacagcaat 120
 ggtttacata tgcaagtaaa ttggacatac aaacacttag attccacctc taccaaatac 180
 cttgattaat gcaaagagga gggggaatac tgacacagga aacctgcccc gaaactagac 240
 tggcagagat gtcagggttaa caaactgcta aaagttacat ctccaaaaag gcacttatca 300
 ttgttataaa agtgcttaaa atctaaactt gaaccttggtg cctgggtttat aaattttacaa 360
 gaaactgcaa agaaccacag actagttttt aatatcaagt ttccatacaa aattgtccaa 420
 gaattttatt gcaataacctt acatgtgaac tgaaataaac ttgcaaact caattatact 480
 aaagtttattc tggaaattca atcancttac tcataactca gatgcttttc ttcattnt 538

<210> 8405

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8405

aatggagggt tctttcgttg gcattccttt tcctccttcc ccaagaggaa tcaacttagg 60
 gagcagatat gcagcgtgtg tgtgcaccca gcatgtgttt tcttggtccc accctacatt 120
 gtttgttgaa ataaatatgg aaataaggct gagcaagaca gccaagccag ccaaactgaa 180
 ataaattcat cactcatggg ctctcaaggg atggaaaccg tgcatttttt tctaaatgat 240
 tatttctgaa gcactgaagg aatggctata tcactaatga ggcctgtacg ccatgactgc 300
 tgattataaa tgacctgcag agagacaagg agatagtgga tatgaagggg agatggtggc 360
 atggangcga ggggaagcag ctgctgtgga ggctgcagct gctggtggcc agcantgggg 420
 attactatcc aaaagcaact nttcctgctt ttctgacccc acantaagcc ctcagaagaa 480
 cctataatta ttctgggnga attcaatgan tggaaanggg tcaaaagccc cccaagatt 540
 naaaant 547

<210> 8406

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8406

```
gtataattgt acaacctttg aaagttacat aagttgtaat gatctaatac tattaatagc 60
cattcagaaa acactttccc tccctcccaa caaccatcca gggggaaata aaagtcctga 120
aaagaggcca gttcaacatg gcctctaccc tggtagaaac aaaaagtga aagagaagaa 180
aacagaaatc aactaagagg tgttgccagt gtctctcagg agtggggccc tggctgttgc 240
ctgggggtcat gaaaggcaga gcctgcagca tgcagtatgg cagccgggag accttgcagc 300
cacatcttcc tcaccccggc acatccacat cccaacttag gtgtcatgga aatctttcag 360
cagggttctc ctccgctgct ccgctatatg catctggttc tccaagtccc ctctgtcata 420
actgtctgca cgctccactt ttcattgagan ggtttcgatc ttagcctccn ctgacctgct 480
nggatttnaa caagnntttt cttgggtccg gactcctgga atatgcctat ggggaggggg 540
t 541
```

<210> 8407

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8407

```
gcaaagaaca catgatttat tcaagacaac tcgtcatcaa cagcactgac tcaaggaaca 60
aaacagatga aaaaactaaa gcaaacgttc tgaccctctg gaggtagacc cgctgaattc 120
atacagctca atctgtaagt gtccaagatc cagggggcag gttctcaagc aggaagcctc 180
aggcactctg gctctgtggg gacctccctt gggcatctgc ttgagaatct ggggaaggga 240
cattatcagg gcaggctcctt tctgcaggcg gtgtcctgct gggagctcag cctaaccaag 300
gcctggtccc tgtgtctctt accctcatct caaggtaag gagagggcac ttgaccaaac 360
tctgccagcg aggcaaagta atggtgattc aagtagtgng gttcaggagg gaaggtangg 420
ggcanaccag aatgagtgcc cttaaaaagt cctgggcaat gtctgctggg gcccaagcaa 480
tgggcccagc ntntnaaagg ggttganaa agggttgaa ccncnnttg a 531
```

<210> 8408

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8408

```
actttgtttc atgtacaaaa ttatttaaaa tactgtatag agttaccttc aggctacatg   60
tataaggtat atataaaaca tgaatgaatt tcatgttttag acatgagacc taccaagata  120
cctcattatg tatatatgca aatattccaa agtctgaaaa aatccaaaat ctgtaacact  180
cctgtcccaa gcatttcaga taagaaacgc ttagcctgtc ttgggaaaca gcagccactg  240
gatggaaagg ggcagccagt agcagaggcc tcagcccctg ccttcacctt gagaatcttc  300
tgtaacaaaa gctgccagct ttcagggaag aaaaagaatt ctgtggcctt gacttaagcc  360
cagagaaaca ggaactgcca aaccttgta cccagcagaa cagacagaga gctgacctgg  420
cttcatggca aagcaacagg agaacctgga nanggtcaat tcgggggcca gcagaaccag  480
gctgggttgg aaggcttgtc actggaagca aagtggccca cattctanaa agagacatca  540
gggggncc                                     547
```

<210> 8409

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8409

```
catcccaacc aatattttatc catatgaaca gataaactga acaaaaacat agttctgata   60
aaacctgcat tcacaacctt atgtagttta aagtaaattt tttcacaatt gagggctgct  120
atttaggact gttttgttaa taataaaaac aggaattata tagaagataa aacaccattt  180
tttactgcta tataatgtct tgctatataa aacataccct caacaagtca aaatatttaa  240
aaccagtgtt tcaaatacca aaaatcacag ctatgttact gttcagtaac tccactcaaa  300
```

taaagttag tactgcattc ttgaaggaaa aaaactgcag ccaaggcaag aactctgaag 360
 ttgcaactca gagtttaaaa gacagacccc tactctgcaa actgaagact gccactctgc 420
 ttcaataact ccagcctgnc acattttact tcaattggnn aaagcactct gntgagaatt 480
 ttaaaaggtt ttaaaagggc atccttaaag gattaatntt ggaggctgta acttccttta 540
 ana 543

<210> 8410

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8410

ctatattggt ttttatttat aaacagattg acataaaata agtccagatg gcagcgtgag 60
 tagctgtgct gctgacttgc ttacaaagaa gcctgtggac aggcgagtgg gtggaaccga 120
 ctccagcctg gaaaacctgc cctcccatcc cccttagcgc cttcttggcc ttccggcctg 180
 attttcttcg acagcagttc tggccagggc aaggagctgt ggtgggggca gtataagcca 240
 gggactccct tcccacagat gaggcctagg gctgcaaaag ggccccgtga agaaaggaga 300
 aggtgacagg gatccttctc ctcccatat ggagtgatgt ggtcaaggct ttatgggtct 360
 ctccacctca aagagaaagt gccctagggt agtgtcctct gaanaggggc cacgcctatc 420
 tgcaaagggc ctctctggga ccaaagcang gcaatcttcc ttcttctgna acccaanggc 480
 tantgtngga ngagttttac tc 502

<210> 8411

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8411

cagtttagaa agttttatattt cccagggtta aggtgtgccc atgacacagc ctcaggaggt 60

cctcaccaca tgtgcccaag gtggttgggg cacagcttgg ttttacacat tttagagaga 120
 catgagacat caatcagtat gtgtaagggtg tacattgggtc ttgaaaggca ggacaacttg 180
 aagaggggca ggggcttcaa gcataggcag gtaagagaga aagggttgca tttttttgag 240
 tttctgatta gcctttcact gaatatacaa tttacatgtg agaggagagt agaggaatag 300
 tcagttatac cttaatctgg cttagtgaag catgaaacag agaaagcaat catttatgca 360
 tttgtttcat gtgaagactt tgagttcttt gtccataagg aattcccttg tgagcaaatt 420
 ttatctttgt ggctggccta ttttaggaata aaatgggang caggttgncat caatcaagtt 480
 cccacttggc ttcctttggc ttaaagggtt tgaaantttt cnttcatatt aacctaggnt 540
 aaaaat 546

<210> 8412

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8412

atccaactcc aaattgttta atctcaattc cagaggtcta ggccaggcca ggcacctggg 60
 gctctgggct gttctgcttc tccgggccct acaccagaa cctggccttg gcttctcgct 120
 cccgggtctt tagatcgtca tcttgagtc cggttccatg ttctcaccgc tcttccatga 180
 tgactccttc tgctcagcct cctcccttgc cagtctcagg gaggatcctt cacagccaat 240
 tcatccttgg gtcccttcc caggggacgt caacagtcta ggcagggacc cttgccccca 300
 actcaatccc catcaccaca gccagcaaag cctncgtcag gggccctgcc tcttcacctg 360
 ctgccttcac aagccccacc agggccagac cccgcttncat cgggcactgn tctgacccca 420
 gtgtcancgg gcacagtggg caaccagccc ggggccggcc aagcggaaca ccttaaccac 480
 tgacttccgg gcaaccctgg ggtccaagtg gatncggncc aacggctttt tcaagttctt 540
 cttcaagcca 550

<210> 8413

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8413

```
gcagtttcaa ccactttatt agggtatatt aggagtgaat tcatggatat gaacttcatt 60
gaatgcatca tgattatatt cagatgcaac tgntctttta tatacttttg aaataacaat 120
cctcttcctt acataatagc aaataactaa cgtatatgaa gcattggtag actattttta 180
atgcaaaatt tcttaaactt tgattcctat atagtataat ctataaaagc aagaaaaatc 240
aaaattatca gtttaatgga caataaggac agttgaagta tgtgtcttca agttcgagtt 300
aagccattaa atttttttaa gtaaatactt aaaggtaaat tttatataaa tatgtcaaaa 360
ttagatctta tttatttagc actttgntca ctcagataaa tttatattgc atatctaag 420
agatatgcca tcatcttcca aggattatac ctctattaat caaaccaaac caaacaaccc 480
ttttaaaggt antcactntt tgaaaccgga angggacat ttcacatgn aattggttta 540
ccttt 545
```

<210> 8414

<211> 516

<212> DNA

<213> Homo sapiens

<400> 8414

```
gagatggagt ctcgctcttg ttgcccaggc tggagtgcag tggtagatc ttggctcact 60
gcaacctctg ccttcccagg ttcaagcagc tctcctgcct tggcctcctg aatagctggg 120
attacaggct cccgccacca caccggcta atttttttt cgtattttta gtagatacgg 180
ggtttcacca tggtggccag gctggcttca aactcctgac ctcgtgatcc accgcctcg 240
gcctcccaaa gtgctgggat tgcaggcgtg agccaccacg cccggctagc acttcccttt 300
ttaagctagt gctggcatgc caccttcccc tcaaagcaga gtcaacttcc tttgtttga 360
gagttttgta ctggcctctg taggcccttt tcaggataca aaataaagt cccttcagca 420
tccacatgcc antgggttgc ctccagtg caaaactggg gtccanant tgggcaatgc 480
```

atntttccaa gaattaaacc ncatggctac acncnc

516

<210> 8415

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8415

aagaaaagat aagcagtaac atttgtgttt aagctgacag gagtgtggca gtaactgctg	60
acattgcaat ctgaccgaga aagaattata gcagaaaaca ggacatactt cacttagcaa	120
taaaatggca cattttaaat acatatatat aaaattttta caaatcaagt gtgaaacaaa	180
agcactgcag tagctaaaat gggaagaaaa aaagaaaaca agcttcaatg gaaataataa	240
ctaactttag aaaatgaaaa gcaaaaaaat atatatataa attcacctag acttaagaaa	300
catcgaaatc tggaaatcag caactaagta agctctggaa atagactgca cattaaaaag	360
cacctttact tatgtgctct gaaatcatag cagcaagctg gtgtcagaat aataaccttg	420
agattacnaa gtgtacatat gggccattaa agctgttttt ggaataaaca ttttncagaa	480
gtgataaaat gatgctctgt ganccaaagc nttcnactn tggaatttca tagattttaa	540
tttn	544

<210> 8416

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8416

actatgaagg gcacatagta tctttattga aagaaacatt tattgaaaca ttatataaaa	60
tgttgactaa attctgtagt gtatttggag tgaacatcat cttgaataga gattttaaaa	120
tttcataatc ttaacctccg acgatatgat tatacttggt taaaaagaac attatatcca	180
gatataaact taacaaatga aatattacaa aatatgaaca tagatagttt tgtttcccat	240

tataattccc agcatTTTca cCctgtcctg ttcatacgag tcaattctct tcttcaattc 300
 ctgtcccatc agccgtctgc tgaaaaacac tgctttgtct tggctaaggc tgcacaagtt 360
 cagtctcgca ctggctcanc ctccccTTTc agcgacacca tttccctacc aggggtacaag 420
 ctgtttcctg ggctctaagt ggagtctgat ttggcattcg gtcccatcct agngctcttt 480
 aagctnggac cctgaatcac agaaccctt tgcttgncta atattaccnc cgccgg 536

<210> 8417

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8417

aaaatttcat gtttattcat atttttcaaa atatatgtac attaaaaag gaagatttac 60
 aacaggaaag attgccttac atgcaacaca aattccaatg aattcatgat gggatcacac 120
 atgattatga tctaattcaa gccaatcttc tcaagtcctat tcccagcca tacttttaggc 180
 tacagaaggg atcccaggag acaaaagtgg aatgaataag aaacaaacat cttttgcctc 240
 tggcagtact caaggggcca gaagatgtac ttcaaaaact ttaagacaat tagaatgtca 300
 agtgccacag ggaagagaaa tgataaccag aaatttgtat ttctagctag tactatttaa 360
 cacaacttca caatactaaa acaaatataa ataagaaagg gttaggtagt tgggcttcat 420
 ttactttttt ccttttcttt ttttttttaa tatctcaaaa aggaagccac tttgcttgat 480
 atcaaaatgc tgtggaaaga aaggagggga aaaaaccccc aatttaatgt ggaatctagt 540
 tattttcc 548

<210> 8418

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8418

ctgaggcagt atatgtgtat taaatttaag gtcacaattt tcactaatct gngaaaacac 60
 atatatgtaa tatttaaaag ttaatgaaat ccagngaaac ttcaacttat ttcatgaga 120
 atttactnac aaaatntaga aaacaagaat ttacctcttt taaatggcat gtctgnatta 180
 cttacaattt gntaaatgag ttcctttcca tacatacctt aagatccaca accttggtgg 240
 cataaataac atgattaaag ggtcaggtac aatgtatatt ttaatatggg atttgtgtan 300
 tgatttagag cataaatatc acacagtga aaatttatca cancctaaat acagtnacac 360
 aggggaanga aagagcttat gtccacattt ccaaggtctt tacaataacg ttatagcgtc 420
 caggtccaac acagcatatn tgcatacaaa agcccactga tgtgaacact tgaaanggaa 480
 tctggcctgg aagggccttc atcttggggc aataaagttt gtncgngtc aaattanttn 540
 caaaagacta 550

<210> 8419

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8419

aggaacagaa aatttattat tatgcaacta gcaagctggg gtcaaagggc tttcccaaaa 60
 aaagtgtgt ttcctatat tacaggtatc aaaacagagc aaaacatcca ggagaaccaa 120
 actgaaactc agaaaagaga caatttctga ggcccaccag atcctgattc cattttgaaa 180
 tactctattg cagtacctct gggtaaataat tagctggttg cttaaagacag gatctgaggc 240
 tgggccaatt ctttaaggcac cagctgtctt gaggaggaag atgaagactg tgaatgaagg 300
 acagcagact tgcttctagg aaaataatat atgtaagttg ggatgcctct tgcagccaga 360
 tgtttccgaa taagtcgctc agtaccatac cagttaaaac ctttcgtggc atgtccaata 420
 ccgtggaaga tgaacacttg ctttcttctt ttttgctgct taaaatatct tcttcaaggc 480
 ctcttctaag gcttgcattc ttaatggcng accaggacat tgggaccatc ccnaagcttg 540
 ancccaaan 549

<210> 8420

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8420

```

ggagagtctc acttcatcac ccaggttgga atgcagtggt gcaatcttgg ctcaactgnaa   60
cctccatctc ccaagttcaa gcaattctcc tgacttagcc tccaagtag ctgggactac   120
aggcacgtgc caccacgcct ggctaatttt tgnatttttt gtanagacgg ggtttcaccg   180
tgttcgccaa ggtgggtcttg aactccaggc ctcaagtgat ctgcccacct cggcctctca   240
aagtgctggg attacaggca tgagccacca cacctggcct ggattagtaa tttcggattt   300
ccaaattcag gtcaagaagt ggaatttatt atgtggnctt tgngaaaaaa atataaatgn   360
ggccttttaa atatatttag gttttttttt aaacaaangn tactcaaacc attacctttc   420
tggccccctt gaaaagaaaa aaaaattgnc catnccattg ncttctctaa tttggaagat   480
ccgaaagact caanggtttt tacttccgnc ctctctgcna nggg                               524

```

<210> 8421

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8421

```

agatcaggat ttctttttat tcctcgttgg tttaaaatgg ctaatcagaa taaaaaataa   60
aagggcctct ttgtggaggc tgggatctcc cctatttaga ggtagaacc caggatatcc   120
ctctaccag caccatagtg aggtgggctg aggggtaacc cccaaggac aatcggaggg   180
gcctaggcct gccactcctt ctctctatcc cccgtttttg gcatgtgatg aaaaatattg   240
ctttttggat tcttctctcc tggccttggg ttttaaaatc aagttaactg tgtaagctag   300
gggaggctcc aaggggccag taggagcaca ctctaattcc tctccccaa ggaggggatt   360
atccaatatt gtttgagcta ggccaagtta ttttctgat ctcccaccac caccagtgtc   420
ttgaagtttt gaccctttc ctagggaaac taaatgccaa tgagcctang aaactnaatc   480

```

ttcttttcaa ggccttttct tttngacca aanttengac ttaacttttc ccagcttntt 540
ctaatacac 549

<210> 8422

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8422

aatgaaaaan ggacagagtt tagngaccaa tnacttattn tctttaaaaa cacataaccn 60
cattaacttt ntgctttata caaccatcta gaaactataa aacagnacca cattgngcat 120
ttaacctact tatcaagaag ggaacttcat aagtnataag aattctaccc atataggaag 180
gaaaaaggag acagctaata gcatagtcac agatacaaca tgagtccaag caagcatcaa 240
ttcttcgaca tcaccttttc catttaccag agtggagact gagaaagaga gtgaggggaga 300
aaaaagaggg aaggaagcac ccacagagga ctaatcacia tccatagtta cttttgacaa 360
ctatagctca gggtttcata gaatagtatc atttgaccaa cacagtgtgg tgganggaga 420
ggggtgaagg aaacacaaat nnaaggatag agtttggacn agaaaaatcc aatttcccct 480
attnccttct aaataactctt catttgggtcc aagcttttgg gctattcagn aaatggcaan 540
aaattatntn t 551

<210> 8423

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8423

agtgcttttag atttattcct ataaaacaca caccctttta actaggggtcc atgaggatta 60
actttcgaca tcgggggctg tcagagggtcg tggacacccc caaccccagc cgggcgctga 120
acaatgtaaa aagaatttgc tctgcaaccc tgtggggggg ggaaataaaa gtaaccagc 180

gtccatttaa tgcagccaag tgcaattcct ttccccacct tagaaagcac caccagataa 240
 tacagcagaa ctgatacctgc agaaagggtg ctggagggtc aggccgtggt cgtaactaac 300
 accacattcc catttigttt gctggataat ttttaataaa gtgaggttta catcactgat 360
 atttaagaat ggctatatgc acaaaagaaa acacaccttt ttggttaagg ggtgaggaag 420
 ttagagaaag catgagaaac agggagcatg tggggtgaag gccgggcaag aattgnaagg 480
 ttgaggcncc ccagnttant tccttgctgn ggaagaccat gcctccgatc anggggtttn 540
 atgct 545

<210> 8424

<211> 515

<212> DNA

<213> Homo sapiens

<400> 8424

gaaaccaagt tcatactttat ttaaaggatt gacaatccca ttttaacaa ttctttgatt 60
 tacaaagagg gaggtagact cgtagcctc ccaaccttag cttaaactgt gatgttgcca 120
 ggttcctggt ggttcagctg aatcctagac agtttccctt ctcttcataa agctgagaag 180
 aaaaaaaaaat tatctccatc taggcccacg ggaattttgt gcatagacag tttgaattgg 240
 tctgaaaagt gtgactagct acctacctat tcacaatgcc tagaaaatgg gctaccagat 300
 atggtagtgg tcaaagcccc gactttcctg tctgaggtac tgggtttgct ctaaggtaga 360
 ccttggcaag gcccctaatt ggtcccgtcc agcaaaagtg atgctcgtgt ccctcggctg 420
 tcaagtgaac ctgggtttgn gaatcaactt ttggatangg atcattctct tggattaccc 480
 ctaggnttnt gncctacan gggntaccta cctgg 515

<210> 8425

<211> 474

<212> DNA

<213> Homo sapiens

<400> 8425

```

acaacagtaa tctttat tttt aggccaacat ccagacatac aagacggaga tcaccatgcg 60
gaaccagcct ggcccttaga tgtgtgtgct cgagccagga tcagccggag tctgacagcg 120
cctgcacccc aacacggtcg gattccagga cgccagtgc aaaaccagt catggacaag 180
cagcttccat gcgtgtgcat ttgattttta aaaacaatac atatttcagt gttaacttcc 240
cccctcacct ggcttgaaac attttcccca ttttccaggg aaacaaactc taccaaaaagg 300
tgccgcctgc aggaccccgg gccagcccc ttctggaggt ggtgctgtgt ggactcctct 360
ggggcggacc cggggccagc acagggcccc tttccaggcc gccttcaaat gcagctttgn 420
cactgccgna tctgntgntt aaaaaatcag ntttatgttt aanggcgggn aagg 474

```

<210> 8426

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8426

```

aaactagaat ttattggtat acaaaactcc atttcataga taaagtggca catctttgca 60
gcttctattg caccaagtat cgaagattaa aaacacaaaa aaagaaacat ttggttttga 120
aaacactgca aatagccaag tacagtactt tggtaaataa aaaataaaat ggttcagatg 180
aacacaatcc gtggaaagaa acaatctagg gggaaggaaac tatggacatc agacaatggt 240
cacaattctc accatcgagc tccatagata aggcaagact tgctaagtct atggatcacg 300
accccatgga ggtcttaagt atctccagac tgaagctaga acaagtatag tgcaattaga 360
aagagagaag gccctcctc cacggataca tccaccctc tgtaaaggag actgacgcat 420
gccaacactt ntacatggga aaggggagcc cccggtgtga cgtctggctc ctggnccitt 480
cttctttcct ctgagcttaa tgctggtgga ggctttgna aaagcactgg ggaaggncca 540
aggncnttn 550

```

<210> 8427

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8427

```

agcagttcac ttcaatggct ggaaactaga cagaaagttg ggaatagtct gactattatc 60
atacttgggg cttgctacat tatcagttct atatgaactt ggaattattg gaaataataa 120
aataaggggc tgtggaggtt gatattatta atagtgttat gcagaaaata tgaatggcag 180
ggaggggcag agagaaaaat ccatttcttc atttaaataca aattttaaaa atcttgaacc 240
ttagaatcta aaacttacag taatttaaaa ccaaccaaaa tcacatccta atttttctga 300
gccctttctt ttcattgaaaa attacatatt ataaaacaga agtttggggg gaaaaaatct 360
atgttttacc atacaataag ttgacaaaaa ctgganaaac tagaacaac aaatccaact 420
atgtagtctg aaaacaacaa ggaaaatggc ttattcatta aaacngttta accattcntt 480
taacctggat gancngactt gctggcttta aaancccaac ttggggatta ccaaaaattn 540
ccgttnt 547

```

<210> 8428

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8428

```

acaatagaaa ctgttttttt atcttgactg ccagagacgc tcctttgcaa tgccttccgg 60
taaccaaat tttgggcaca acacacagct ggccttcatt tcttcagggg ctggtaaaca 120
gaggcattgg ggtcaagtcc agaggggctg gtctccacaa atttgaaga gtagtggggg 180
gaaacagggc tcagggggct ggtggcggca ctgtatgtta tgctgggcat gacggccatg 240
acttcggcta tcttctgttt taggtccttg atttcctgat ctttctgaag gatttgcct 300
tgggcaatct cgagctgccg ctttgcacg cccagtgcgg agaacaggtc cagcttgatt 360
atcgtctctg cacttaagct gttctccagg tgctgtgttt tgtcttgcac ggctgaaagg 420
gctgacatta acacctcagt gtccttctca ttttccttat atttccgaac ttctggactt 480

```

ttaagtctaa gttctctgat ttggncttct ttcaccttca tgntccatcg ggagcttttt 540
ggcctttggg ttctaagtct t 561

<210> 8429

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8429

aggaatatag attttaatca ttgtgctgct gctattaacc agagtgcaat taatccatct 60
tttgtggatt ttgatgccac agtgtaaag agagggtttc acacagaaac actctggggg 120
ccttcggtga caaaagggt aggcctctgg tggggagggg gtggcaaaag gtgaagtgga 180
attaggagag atgtggggag cagaccagg gctgggagac tgctccttcc ccatcacaca 240
tgcccatcaa ggaccccaag aggaaggat tcttcctgcc atggcctggg ctgtccaagt 300
gagcctgact tcccttccaa ggcagctgcc tctagcttca tgtccaattc tcgtgagta 360
gatgaggtcc agggtaggcc cacagttgac caccaaagtg tgaananata taagccaagg 420
gagaaagaaa gtgggttttg aacccccaat cattctccat tttcatccta agctccttaa 480
aactagttca naacttgggg aaagacngca ccncagtcta tcctttcggc anactgnntt 540
tcctgcctct gggganggg 559

<210> 8430

<211> 388

<212> DNA

<213> Homo sapiens

<400> 8430

ctgtgaaaac agtgaaattt tattgatgat aactgcgga agacatccat accacaacta 60
agcatgagcg attttagaag catagagaca aaggcacttt caccttgcat tttagatatt 120
tgacaaaaac ttgaaatcag acatattcat agcagtacag aaaaccaatg actaattgtt 180

cacataatca gcacccctata tcctacaaaa tgtagcttc agatattaga acatttgaat 240
gtctgaaaaa agaaacagat ctaagcatgc agttgtcctc cctgcatttt cacgagtga 300
caggaaacac attgncacta gctattatca tttgctgngc tgtatgaaag agactnggng 360
cacctgggng naaacagcag gcanctgg 388

<210> 8431

<211> 485

<212> DNA

<213> Homo sapiens

<400> 8431

gcaaaatgaa acaagtttat tttctccaat aacttctgta aattacaaag acaaantact 60
aaaaactaca gcatataact tttcaatatt taaccagagt actcgtaata aatatgcatc 120
cggaacaag ataaaaggct acacctcgtc aggcatccta caaaaatgtc tcaagtttta 180
tatactctgc ancatttntg tgcgggggca naaggggctg ttgtgtattt tctgaagtgc 240
tgtgacaaaa ggtcctttca ctttctttg gagccttttt gaaattgctt aactataatt 300
aaacaactta agaaaagtaa caccaagctt taaagccatt tttgctttgc tgn cattggt 360
ccttatccaa tacagatcaa catatcatcc agcacagcca agcacccnct gangccaanc 420
agccttntgg gacatgggcc ctgtcananc atgccctact tttagttaa tacttttigna 480
agagt 485

<210> 8432

<211> 505

<212> DNA

<213> Homo sapiens

<400> 8432

aaaggaaatg cattttatcc cactgcacat tgcaaaagtc tcacgcaaaa aaagctagac 60
tttcctctat gtatggcatc aaaaggagat aaaaaatgat tggatcaccc agattataaa 120

taaggttatt tgtttctcaa aaatccttat taaaacatta aatcagct cttttgggg 180
 agaaatacat tcatttcagg gagacctcg aagagtgacc atccttttgc tctaccccaa 240
 ccaggtgggg gaggggaagc cccagagggc ccaaggggtc ccctccagtt gagccaggta 300
 gccactcaca tcctgccact gaaggaggtg gctaatagcac aatttacaaa tgaaactgca 360
 cgtccattaa attaaaccca atggaaaaca cacgtgtgac ctgtcctgtc attcacagnc 420
 atgggggtgag aggggaaccg aggaaaagg tgcccaccca nggggtcttg gaangtgggt 480
 gggaaggtnt gtgttanggn ggnca 505

<210> 8433

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8433

aacatcttta ctttttaatg aaaaagtaga taatctatgt gaaaagtaca aactcaattg 60
 caatttcaag aaaaaaatat gtatttatat accataaata agcaaaattg gactctgaag 120
 ccctaatact tcaaaagcat tcctcctatt ccataaaaac ctagtattat tcagcaacag 180
 tactactact gattttaaaa tagaaagcaa gtctatcttc acatgtagtt ctttgtcttt 240
 aatttgtaca actcaccaag gttattttca ttcttagcac ccggggttca ccagggtgtg 300
 atccaaagca aaccagcata ggtttttaac agaaaatctt tgccaggaac ttcatgacct 360
 gtattttcct cacctaggaa gaagctgtcc ccactcgcat gattttgaac agtgtgttga 420
 tgttattgct tcgaattgca tcccgacaag cagtgatcac ctggttcttt tggttttcca 480
 accgcgac gaactgctct ttgaattgct tggattactg ntttganggt tnccaacang 540
 ttttgggg 548

<210> 8434

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8434

```
cttcattaac cctttattac aagtcacgct cttatagaag tatatgtgga cttacgtgaa 60
aaaatcaaat gtatccaaga ataaaaaaca cagcacataa agtagtatat gcattccagt 120
gttcgcgcca gagacggcgg gcgccaagt aaaagctctt ctaaacggc ctgactgggg 180
caggccgggt gcgaacggtt ccgggcctca ggcacagtgt ggggccgcct gcctcctccg 240
cgccccggcg ggcgggggca gcaccagctc ctagggcctc cgggccagcg gcggacccca 300
ggccggccca agcccgacgc caggcagaac cttttgggcg gggccgtatc tggccctccg 360
gggacggcag tgacgacacc cccagaaatg tgggcttagg gctggccaca gggtaccctc 420
agaagcccg c aagcttaatc gggctttttt aaggaagatc tcgctcagaa tcaccacac 480
aggggaagtc cgtctggatc gaaaaggcca atgctttcca aagggccnaa ggctggggtc 540
caccttttc 550
```

<210> 8435

<211> 179

<212> DNA

<213> Homo sapiens

<400> 8435

```
aattatacag atattttaat tgtatatata tcaggtacac ggaataaaag tcctactctc 60
tagaacatga gaagtcaata aatagaaaag atatacaaag tggaatgaac ataaaaatga 120
ctaagcatgt gatcttcaca ttcatacagn ntntcaacta atctttnnca atnaaaang 179
```

<210> 8436

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8436

ctagtgaggg tttatitttaa tcatcagtaa aataaacagc agacgaaaaa aagattagta 60
 attaaaacgg agtgtttcca ttctttactc ttttaagcatt atccatgcac ttctcactga 120
 gctcacccat ttgttgaaaa aggagacaaa gccatatccc ttagactttc ctgttgccat 180
 gtcttttacc actcgggcat ctctgaaatc agaaacaatc agaagttag gtttgcaaac 240
 tatcctctgg atatcaaata agaatttcac acacaactca ttctcatgtt tcaccttcat 300
 taaagtgaac ctttaatgca aattcacctt ttattctaca aaatttatca tgtattagga 360
 aatgaggctt aattttatag acatgcaa atcaataactta agtatatatg tatatttata 420
 ttgtacagaa attgcctctc tcttcaaaaa acttttttaa cttttaaata ttaagcatgg 480
 tgaaagcagc tactccatga actacttanc ctttattaag gtcncaggcc attngatgaa 540
 agggtttctt taaccnngc 559

<210> 8437

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8437

atagtgtgt gcaattta at gaacacaatt aattttacca ccattttaca taaaaggaaa 60
 ctgaagtgca tttcttaggg tccactgta agttgagggc ttgagattcc aagaaaagtc 120
 ttatttcaga gctcagtgtc ttgccccaaa cgcagcctca ctgctcaatc acattcttga 180
 ggtttgattg gctgaacgca cgtggaacat caggttcatg tttccaagca agaatcatgg 240
 gttggggaag gcaagtgttt actgtggtcc agctgaggac tgtggtgtct gaaactttgt 300
 cacatgggag gctacaggcc cggggctggc ttggctcccg tgaaaacact gcagcgggca 360
 gccagtccgg aaggcagcat ctggcagggc cttcaggcct tctgagtaag gaagacccca 420
 gctttgcaaa agacatagag gcagcactgt gactggactg aatagcncac ctntntaacc 480
 ctntntcaag gcaaangggc canaanccag gtggaaatgg ggc 523

<210> 8438

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8438

```

gggggaagca caagctttat tggctgaaag ttcttctcag gagcctgggc tgctgggact   60
gcatgttcct ggatgggctc ccccaggcct aagctccagg tttcctctgg ccttccgaag  120
gattttgtgg gttacgacca attgatcaaa gatgactttt tcctggcgct tgctcagctg  180
caaaagcttc atggtgtttt gcaacttctt ttcttgttca aacaattttt tatgtagttt  240
ggtgacctct gccttcattt ctccaatctg ctcacagtga agggggcact ggccatcctc  300
ggggagttag actctccaga gaagcttcag ccgcctgtag gcctcttcca ggggtcaagct  360
tggccgtgct cacactgctc acaaacttgc tcantgggtg tgggtgtgga ccctttgttc  420
ccagctcttg acttgtggaa ctgggagcct cttgggtttg aatggccatt tcancaagga  480
gccctctgtc cttgctgaac tggttgagca nggcctataa gncctaata gncaggaca  540
tgnggcatt nttntggcc                                     559

```

<210> 8439

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8439

```

ctgtatatat ttcaagtga tcatthaatg tgagttaggc tcagttagn gttaccataa   60
gtattaacag aagaaaaagg gaaagcaca acattttccc tctaccagaa aagggtctga  120
tgtaagataa actagcctgt tggtttaaca atagctcatt aaaaaggcca gagaatctgg  180
gagaagatgt acttgaagc actgtcctnt gagggcccat tccaaggga cagcaaaata  240
ctgaaaaaaaa ttaactggct caaaaattat attgagagat aaaaagagtt agtcacagct  300
tagaaaaaaaa ttccagaata aatgacacta gctagattag taattctgat gtttccttgt  360
catagtactc tgtgcgaaac agagggacta caaactgggtg cccctttgaa cagagtgggt  420
ttaaataata gattctccag tgcccaactg natttcaagt ataattctgg gatttgnacc  480

```

tagaaatccc ganaaaaagc cccangggga aagggaaggt ttttggcctt aaaggattgg 540
c 541

<210> 8440

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8440

aactctgaat tcttttaatt ctgaaaccag agacatgtac aacacttaca gcattcacac 60
aacactatct tcaaaatagg ttttgaccc ctaaaaatga aaattcttag tgacaagctt 120
tagatatgaa acttagccca gtgggtattc actttgtcac aaaaagcaac tacagacaaa 180
tagtttttcc ctctccccga cacaaaaact gaaattacag acttttaaag cagaaaaaat 240
ttctccaaa atgcaaatga ttaaggtcca aggaacaaat gaacagaaga tctcaattat 300
tcaattgagc gagtgattta gtttgcata taactccttt tcttactact tctgatata 360
tgattctggc aatatttatc ttgnatctac tgggcaagac actgggaaca caaaggaaat 420
tttagacaag gtccantggt atgctggtaa aggttaacaa ctagcttntt aagggaagg 480
aggnctttac ttatagcatt ctatggggna atcctccaan tgccgcagat ttcagctngc 540
aacaatttgg cactgngtn 559

<210> 8441

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8441

cagctttcca acccagctca tggagcttta ttcagacggg agtgacaaca tctgtcttcg 60
ttcttgctgc ccttgaagg gcaggcccta ctgagccata ttccttagaa acccaatgcc 120
gaaggcccat gtttgacctc ccactttatt caagtcgcct aggactaggg ctggggcctt 180

cctagaagcc ccctntcana acctgttctc acccaccac cactcccgtt gtcaggccca 240
 gggaggaccc atgaatgaca aaaatcatgt aggatattc cctggactgg gaatcccctg 300
 ccagcttcaa ggacatatca tctgacacag ggagaagctg acatctgtca tattcttctg 360
 cctcacgtac acacacacac acacacacac gcatacgcac tcttangctt tcaagaagga 420
 agtgatgtgg canaatgacc gntggcacgt ggtnaccact tcttggaag gatcccttga 480
 aaaatgacct tgcccaaggg gccctnaanc atnggttgcc acaaattgnc ccatgggccca 540
 actttttgac cctttttttt gg 562

<210> 8442

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8442

gagtgaata ttttattgaa aatagttaat ttaaaatata tacatcattt ttcaaaagcc 60
 atgtgactga taaaaatata aaactttcca tacaagcacc atctcagctt catcccctcg 120
 gcaaagtgtc tcccgaatct ttccagatgg acatttcgtt tgagtctcta gcgccctctg 180
 gtgaaacacc atgaaattgc ccaaaaacgt aattcaggct ctgctcagga cggaagggtga 240
 aatagcagaa tgagcgccta tttcaatgtg acaggttggt atgtgctgcc ttctccccga 300
 gctcaggaga aaggcagcct ctgtgagtgc ttctctctct ttagggaaag tattcttccc 360
 atggacactc agccaagctt attgcaaaaat accttcttcc taagttttca gcatcactgc 420
 cttctgaaaa aacaaaaacc ggcaatcaga caggataaat aatgaaagcc tccaatcatt 480
 caggaccagg nccctactcc tggcaaaggt taaagggccg cnaaaatggt taaaccaggc 540
 tgngtttcct 550

<210> 8443

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8443

```

gcaaaataca tgtgttttgt aaaagaaatc tgcactgtgc ttggtttata ctacataatt 60
ataagtaagc aaaatagtat gacttctttt gactaatcta ctcctaaagc cttgagttgc 120
cgttcaatct cttcatctga gattgtagcc tttgaagtag aggagatgg taagcttcga 180
gcagctgatg gagctttggc catctttcca gaaatttcaa ttccaatttc atcaagaact 240
tgattcacia tatcctggct ttcttcttcg tcatcagaac cgtcaaagat gtcatacaagt 300
gtatcattga ctaggggata tgggagaagg agcaaagcag ttactttcaa acaaacttca 360
ggtagactt acatattttac agctagccca actattttgg atattaccag aaggcaaact 420
cagtgancaa actaaaaaat ccttcaaaag tcagtgaagt aaatgggttaa tcctattgag 480
ccnttnaatc tggaataatg gtcatttcac cccaantatc ttatngcaac aggctactct 540
tttttaaaaa ttaatctaatt 560

```

<210> 8444

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8444

```

caaataaaat ataaaatgat ttattccaaa gccataccca aaacatacaa tgaaatacat 60
ccctgttaaa gacttaataa aaagagcaat ctttacattt tacaatttga agaccttctg 120
ttcccacaaa aagtctcata aaattccata aagngtcaaa tgtattttcc tgtttatata 180
aaatgtattc tctcttcaaa tatagccgtt ttattatgaa attgttctca atttctgaaa 240
ttctcagtag tctatagtat ccattttca catgcttctt aaaatgaggt aagaagacaa 300
acggtgaaac ttttttcaga tcattttttc agaagtcaat gccttgctga tgcaaagcgc 360
aacatgcttt tgtcatccct ttcactgaa atatittccc agnggttact cagtattttg 420
cncccaaaaa cagttccaat acctggccnc ttaaaaatcc ataccaggtg gaatcttct 480
tatgggattt aanggctgga atcaagnctt tggtnccagg atcactattt cttacnggtt 540
tttaataana tcccn 555

```

<210> 8445

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8445

```

gaaggaaagg aactttaatg agaaatcaaa acacaggga ccaaagtga aatcatccac 60
ccccatggg ggggccatcc tgaacccac atcaaccct cagccccctt caggccccca 120
gcgcaggccc agggcctgga gcttctgcct caggtagctc ttgagctggg gcaggcctct 180
ctgggactcc agttcctcga agggtagctg tggggagagg agaggcggc aggttaccg 240
caggctggga gtgaggatgc gccacgggcc aggccagggc cactcaccgg caggagctgg 300
tagcccatca ggcctaggtg ccgctccctc agggccctcg agcccagcag caccggccg 360
tcccggcaga aatgccagcg ttcccgaac accagcacca cccttgagg ggganggacg 420
tggtcaagg cattgcnggc aangtgggca agggttncct aaccttgctc ntttacctnt 480
ggcaaggtct cagtatgcct ngaggaactg gcctttggca agacttgtagg tttgcaggaa 540
gggtctggtc ctac 554

```

<210> 8446

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8446

```

cagatgtaaa atctgtgcta ttatttgaag tacagaattt agaatatatt cttaaaaata 60
caattaacac atccccaact ttctatgcta aaaaataaag aagactgtaa tacagagatg 120
ccttgattcc aagtatccca cttactttcc acaacaaaaa gttttgttcc agttttcata 180
aagctctaaa tcttttggag aaacactagg tcgcacagtt ctaaaagcat tttcaaaatc 240
aatgtaagct atgggtcgaa cttgatccgg tgttatggta gcaatgtcag cagtttgtaa 300

```


actgcgaata ggaccaagag aagccccct gcaaagctgt gtcattgtctg ctcttgaaaa 360
 cgcattcagac tgctgnacaa tctgggtcaat ttctttctca ctgnggcaac actgntcttt 420
 tggacattag attaattact atctgggtcc tggctgaagc ttntgggang ggaatntaaa 480
 gcccttttac caatcttntt cggcaggcct natnaattct tggggccgat tgggtggncc 540

<210> 8447

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8447

gagattgagt ctggctctgt cgcccaggct ggagtgcagt ggcgccatct cagctcactg 60
 caagctctgc ctcccgggtt cagccattg ccattctccc gcctcagcct cccaagtagc 120
 tggggctaca ggcgcccgcc accacgcccga gctaattttc tgtatttttt tagtagagac 180
 agggtttcac catgttggcc aggtgtgtct cgaactcctg acctcaagt atccgcccac 240
 ctaggcctcc caaagtgtg ggattacagg cgtgagtcac tgcgcccggc cccagtgact 300
 attcatgaga acaaaagaca aggcattggct gactctccag gttacagctg gagaagaggg 360
 gaaagggtgt tggttgtaca agcagctcag ggcaactggt gcttgcggcg tgcatgtgcg 420
 gncccaaaag cgtggntttg ggttacaaa tgccttcaag gnaaaggcca nantgnact 480
 tgacgggaca atcactgtgt gtggggggac ccatgtcggg tgggaggcct gganggggnt 540
 tgcctccttg gag 553

<210> 8448

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8448

gaaaaatcat ttttaagaagg caaagttcca aacagggtta cacaggagtc tactcagttt 60

cctggccata caggattaac gctgtgcctt acgttagagc aacaaacttg actgtccgtg 120
 tatatatagg tgagggacaa agggtttctg cagccaagca ctgcactcta ttccgctgcc 180
 tgggcgggcc ttgagcagga aggtccctct tgcaccacct cctccacttc agttcagctc 240
 tctcatgtct tccaccaaga ggacatggtc tttttccaca cagatcacat gggatgggtga 300
 atctttcttac tcatgaaaaa cagcccaagg tactgctaata ttgggacggtt ttattttattg 360
 gaaaggttct ttcaaggga cttttctgca agaccaagca atgtatgtat ttttcttttg 420
 naaattacaa gttacattgg gaccaaaaac acatggngac taatgnactt tgcttctagg 480
 ccaatttaaa gaaaagtntt tnatcctcac aaatccagng aancttattt attctaaaaa 540
 gttaaggagn 550

<210> 8449

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8449

gcagttctag cctttatattt tctttgacga ggagtgccac actgagggcc cctctgcagc 60
 gccgcacagg gaagcgggtgc ctgggggagc agcctttcct ctgatggcgg gaggggtcaa 120
 gggatgcagg agatccacgg cagcacacgc agcctgcagg cgcagcacac aggcagagca 180
 ctgcccagca gctggaacat gagaatgagg gccacaccac ccagctgcag cacaagccca 240
 gcacggcgtg tcacggcacc tggcaccacc agaccagaa tggcctgtgc gagaggcgca 300
 cgccactgac gtggctatgc tgtgatcaaa gcccgacacg ccggaagaag agccgcagac 360
 attgtggggt gcacacactt gcaggggaac tgtggaaaac cctgatnggg tccctgagcc 420
 cttgaagttg cccaaggac cgnacaagan gcaactgaag gccaaaggta aaacccttag 480
 cncatgtngg cacccaactt ncttgcttca cangatgtta ggaagcccaa actttcttgg 540
 ngngttagga caaaaaaggc cccctn 566

<210> 8450

<211> 483

<212> DNA

<213> Homo sapiens

<400> 8450

```
aataataaaa tacaatttat taaaggantc atgtttacat agatacagaa catcttggat 60
ntttcaacac catagcaaca canaatnaat ttcttcatgt ntaaaagatg tgctgaaagc 120
tgcatgcctc atcantttnt attttattgg ttatggctat agttgacatn ttccatata 180
aaaacaaact gcacagcatc acatatagag tacagacatc ttaagttcat tcacaaagtt 240
aatttttcta aactgccctt caaaaattta catctttgct caattctaaa cattcaacaa 300
aattagcttn ccaagaaaca naaatgatac ccaatttctt tgcttttcta gaagtaactt 360
tccatttgnt catgtatitt gatatggtna tattccccac ccganttaaa ccctttgggt 420
aaaagagcaa cctacttttag ggtcaggcta aaaattaagn gtactanatt ttggnnngtt 480
ttt 483
```

<210> 8451

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8451

```
cacaaactat ggcattttat ttcagagcct ttgcttacat ttgtncata tattacataa 60
ttcttcattg tttgcagatc ctaatatata ctttatagct ttattctat aagctttttt 120
cttcaacatt ttgtgtcaa caaatcttta cagtccgtga caaatttgaa taacttgaaa 180
ccattttcaa caaaattagt tactgtaagc acacactaca agactgaaaa tgcttttctt 240
agaaaagttg aatgtaaagg attctgacac gttagcatct acaacaaaac gcattgaaat 300
tcccacgtcg tattgccagg aaacaaagaa aacatgccag ccccatccaa aaaaagtnca 360
cagaactaca attaaaacag taaaacagtc tgtcaataaa gtctggggat taacagggcc 420
cgatnttaaa tagcttggat ggacncatcc ccatttccaa aggnntccaa nggggaaaaan 480
ttaatccann gccaacc 497
```

<210> 8452

<211> 417

<212> DNA

<213> Homo sapiens

<400> 8452

```
caataagtgg taacttttat taccaccata tgtaattatt gatatttcac agtttttaaat   60
acagaaacag aatgatacaa tcttcttgat tccttcccca gcacccctcc aatcctgggtg  120
tctgtagagt ataggggtgtt aagaggtttc agaaaccacc ccagcccaga cctggaggag  180
aagctgtgat gacttctctt cattagctga acctcacitt attcttgtgg ctggccctcc  240
actgaggtct gtcttgggaac tcctgatgag attcctgcct tgcccactgc ctgcaggtcc  300
tagccagcaa cccagtcctt gtgtggcatg ggcttcctgc tgctggatcc ccggctccac  360
tgcacacca ccacacctcc ccagngnta cctnctntt ccnggactgn tnactat   417
```

<210> 8453

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8453

```
ggggagtagg ttttacttgc agtacagatt cttttcatta cagatcacaa aaatacaata   60
caatgtgaca agcccagttt aagaattacg tgcagtagct catattaaca caaacagctc  120
cccacgaagg ccgacaagag ctaaattccg tgtcaacagg gttcattgca ggagtagaat  180
aatccggtac aaggaacgag aacagattga aaccagaaac aaagccatgc ctgacagtca  240
atcaaggtca atctgatcat ttccatgacc aattacccat gtgaacaatt caaatgacg  300
gtggaagagc tgagcacctt gtactcacac acgatgccca cagcttggca aaaggtacac  360
aaacacttgt ttgaaaagaa tgactgaaac gtctactttc aaagaacaat ggacactttt  420
aaagggaatg ctgacattaa cttttccaaa atggaanttt aaaatgtnag tagtactctt  480
```

ggggaagaat ttgcctggaa ccgtaacctt gatttcccag nggtttaatt aacnggggtt 540
ttaatttaaa actnttc 557

<210> 8454

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8454

atttaatttt tccttgcaac taatggaatg ctctacaaag ttgagggtca gagggggaac 60
aattatatag aaatttcgga gatgtatatt ctttggcctt cgaaattctg gagcaaaaac 120
gtctacaagc attttgaaat attctgtgcc ttccggcagaa tttcgtgtgt gatcactgag 180
gactgaatcc aaatgccttg ctgcttttaa tgtttcttct gcaagacctt cttcttttac 240
tagttcttca aaatttacia tatcttcaag atcaggaaca aatctaattg cattgctgct 300
acaatgaaga ccaccagatc ttatcattcg tacatagccc atagcattac caatctggct 360
gatgagttgc ctgaattgat caaggtagct ctgtccctca ngtgttattc caagttttct 420
gatgcctcga ttgaattttt ctgctctatc aaaanggata cttatgatca ttttggggcc 480
ttaatttncc tggaaaaatc gaatatcntt natcaatcen ggatttgatg ggggtcatcat 540
ncctnaaatg gctaa 555

<210> 8455

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8455

gttctgattt tgacaagggt aacttcttct ttattaaagc aaataactgg acataatctt 60
aaaggattcc acctccatcg tctttcctaa cttagatctt cattgagaaa ttgggcaagg 120
ttaagtttac ttttttctag tgctgcggtt ttggctcgtc ttggtagtct catcttcatt 180

tctgattctg gttctggaac ttcattgatca ctttcagagt cggcttcagc agtctgacac 240
 ctctgtttcg tcctagctga aactgtcact tttctctgtc ctctgttagt ctttagctga 300
 gtagactttg atgcttgggt tgcttttaca cccctgagtg gagtcatata tacttcttta 360
 ttcttttcat cttcattttg gaaagtaagt tgtagtcaag gtggcatcct gtgctgcttc 420
 agcttgggtca ccaaattctt tattnccttt tctaactgaa tcttgaattt cttccaaagc 480
 tnttaagaca tgtcctaact tttacttgct tccanaatct cattcaattn ganccggagg 540
 atct 544

<210> 8456

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8456

ggaattacag ggtcacattt taattcctga attttacagt ttagcattaa taccaccaca 60
 tgtatacaaa tgggtgtaaaa caagtacagt ggtatttttt aatacaaaat aaacatctgt 120
 tttatggaaa aaactatact tcatatctac acagacagct catcttttcc aaacaatagc 180
 caaaattaaa attaactaca aaatctccag aacaggggaa actgcttttag attaaacgat 240
 tccaggaaaa atggaccgt aacacattac aagggtgatc taaagattgt ggctggaatt 300
 actgttaaag ttttttttcc ccaatgcatt aaattgtatt ttggggagat ttttctcact 360
 tcggcatgat ctcatgatcat agatgagcaa actaacatta aaatatttac agttaacttg 420
 ttgtcttaaa aataaaaactt aactggttgc ctcaatttat ttttnaaatt cacttaccgt 480
 atattggaat gngcctttac tcttttttaa aaaaccgggt ttatntttcc ncccttg 537

<210> 8457

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8457

```
acttttcaat tttattgtat aacttttcat taaagtgaga aagccattat attcataaga 60
caaacacagt atcaaagaag ttaaagtcac taggtaatga aataacaatc atctcaaatt 120
tgcatgcaca tgctcaataa ctttttctct cagcctaaat gccttattga cagggaag 180
ttatatgaga ggaaaacaaa gtggcaagaa aactgcactg gcccctcagg acaaaaactc 240
atcagggaag gattcaaatg ttttaaagtt ctgcaaaagc aatatgaaa accaaagtcc 300
agcattgggg gcggttaaag gtgggtttgt gaataggaag aaaggctgga agtttcagct 360
cccttacaga gtacctgga aaaagacact gattagtaac tacatgagct aaattctcct 420
ttagcatctc ttaagtatta attctctgca aatatttgga ttacaatatt tccaattgct 480
tccttgggaa aaaaatttgg ggngancnt ttcaattttc caaacngggg aanttcccaa 540
ancccttgg 550
```

<210> 8458

<211> 511

<212> DNA

<213> Homo sapiens

<400> 8458

```
ccttcacga ttttatgagg aagttctgga ttaaaatcat ggtcaaccag atgttgcttt 60
tgctgggaa gatggtgtca tattctgttg cagagtcac agtgcccatg atagataact 120
ccttaaattt ttagtttctt tgtggtctca agtctttttt tcagcagctc cccatttcc 180
agaagtgagt gcagataact gctctgcacc ttcccttgca cagtctttga aaattttctc 240
tcttccggtg agagagaagt gtcttctaaa ataagttctt caagttaaag tgcaattaga 300
tgtgtttcaa gccctttaat atgatccaca acattggaaa ttaaagtctg aagcccagta 360
acatagtctt ggaaactggt aaagacaggt ggcatgatga tgctggttcc tttttctcct 420
tttctttttc tggaatttta ntttgggatn ggccnaggga acttttacag taccnggatc 480
ccaanggt anccggaatt ggtntaacca a 511
```

<210> 8459

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8459

```
attgtcaatc tttacaattt tattgtaaat catagtgtga gatacagctg caaatatagg 60
gaagtaagtt cacaaactgt ttttttctaa agctaaagct aacattaggc cttgctatgg 120
tagaactctt cactgggttg tttcttaaaa aaaattcacg caactgacag gaggaattgt 180
ctttattctt gcattaatga taaatgtaat ctacaagatg gccttcattg attagaaaaa 240
ggaatcagac cacaaggaaa aagaaattgc tggttttcac tcaagattta tctagaaaag 300
tgtactgact actggaataa tagtttacc ctaggttgta ccacagaatg agaaattcta 360
caagattata caactctttt tctacaagat tcactactca tattggtttt attccattnc 420
ggaattagga aattaacttt ctaaatatca ttttttttct ccaaaaaaat ccttttacca 480
gctacctgga tatggccaaa aatatcttga tgctgtaaag gtctatctcc ctagtaaaaa 540
tgaataaa 548
```

<210> 8460

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8460

```
aaagctctga gcacgtgatt gctagttaa ttcaactggt acaccccatt ctgccttgta 60
aaaataacaa aacgctccta tcaaaatgac attgtgatgt gactacaggc tttttgtttt 120
ggtacagctc taaaaaatgt tggcaccgaa tgcacttaag aaaagtgtta aggcttaata 180
caaatacaga gacgagtcatt ttctcaatgc agcttagagg gtgagaacag gatgctaggt 240
ttttaaatct tccaaataca ggcagtcacc aacgtacaga catacaggac acctcccaa 300
tgtaaacgac agccacacag cagggttgc atgcgcagga actcttcttc tcccagttag 360
cagactaagc actcttgaat cccacccac tggctcgcag agggaaagaa ggcaggacag 420
```


atgccangaa gaagtaatgt cangggcttc atacaagttg ccaagggctt ntgctgnagt 480
catattttcc tcattcccat ctctgggttc tnccataacc canaagtccc tgnccaggggc 540
ggaagtaaaa a 551

<210> 8461

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8461

gagtttcaaa tggagtatit tattcacatg ttagttatca ttttaacaca cacacaaaca 60
ctgacacact ctggtttgcg tggaacaagg gtggtctaaa tatectaaaa gaaaatgaaa 120
aattaaagta cattaatitit tcattactgt aggcaattac gtccacatca cttacaaagc 180
tattactgat attgtccaag gaagcagagt ggtacagagg aaggaaactt gagggtaaat 240
tcatcagtga cataacagat ctcaacatga gaaagctgac aaaacatgaa tttttgctgt 300
gaaatttctc ttgtcaaaat atgaagaaaa gtcaatcaat gggcagtaaa taagaagtag 360
gtggtgaact tttgctgtca attctcctca cagtatcttg cagaaggcat caaggaaaaa 420
ttgcttagnc ctttttttgg gaccaatttc agaacttttc caattgcaat gggcttaccc 480
tcatctcttt aaagtaaaac cgaccattit ggggaaaatc tttgaacgt ntcgagggca 540
aatgggtcct gntggcctta a 561

<210> 8462

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8462

catgattcaa cactgatcag tgtttaccac tggataaatc tgagttcaca ctttccttct 60
ctgacctaaa tgtgaagtca ggaaacacat gtgccctact tccatcctga gctcagtcct 120

caatctccca ccagcctcag gcccctccac ttctcagatc aggtcccaga cctgcccattg 180
 aaaatgggga gcaggctgta acagatttgt ccacatgttc ctaccacctg tcccaaccca 240
 gggtagccac ccagagacat ctggtatcat ttaacaaaca cattgaagga caactgggtct 300
 tcagagctga agagagctcc tagggggaga agctgggaca acagtgaaat aagtagcagc 360
 agcaacgaca gaagtgaatg gtgacaaaga ctgctgtgat gagcaggtag cctatcaggg 420
 tgagcttcac aagccgagcg agtntcagga tctgagaacc aaggttgggt aatgnccatg 480
 agatgtcaca cccagccgga agccagnact tgcacaccn gcttcagcaa tagtanatgc 540
 cccggca 547

<210> 8463

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8463

ggttcttccc aaccatctta cgacgttta ttactgtgat ttcagagaag aaacaggctt 60
 acagaggtta agggcttgag accactcaac tggttttaag tggaatccag accagagggtg 120
 ccggctccac gtctactgcc ctttccacgg tgccatgctg cctcccacaa aacatccaca 180
 gtgcccttgg ccaatgaggg gccgccatcg gaggtcacag gaagcctttt cacagtcctt 240
 ctggggcatg agtggggagc agctcttctc cccagagctt taaagcccca tcgaggaagg 300
 ggtgagaact gacctcctga agtgcccgag tgtgtgtgta ccgggagagt ggactcaatt 360
 tttatTTTTG aaacctcatg cacagagttc cttatatccc ccaggtccca caagaagtac 420
 caggtgccat ttaanaaccc cttntnaacc tntggccanc cctgnaagca acacgggcct 480
 ttacaggctg gcttnttctt ttggcacaca agcctttcgt tccatggaga atc 533

<210> 8464

<211> 396

<212> DNA

<213> Homo sapiens

<400> 8464

```
acttgggttg cctttattta acattctaaa gaatgattat taaaagtcaa ggaccatatt 60
tagatctttc ctaacaaaga agaaataatg ctgtttccat aagtaagcca aaaattttct 120
ctggttaatc aggtaactcc caagctagta agaacttctt ctgggactct ttatccactt 180
ttctacagga aacagaacta ctgcaggcaa gggtagcttt atcttattgc ataagtatgc 240
aatatttgc taaacaagat cagaaaactc actaaatgag tagaatgggtg agatgagaac 300
atccttagat acattaagag ctaaacagga tgcaaatcag aaaacaattt cacttaaggn 360
ttgcttggca tctttnacat tagccttnn tgnanc 396
```

<210> 8465

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8465

```
caggatatga atacagttaa ttacagtttt cagactccca ttacgacaca tatctaaagc 60
tgaacattgc aaactgacct tactagcagc aattctccct agacaggaag ggtttcagtt 120
aathtagcaa ttaggagtaa agacaaactt acaagtcag gtttttcttg tagcagctgg 180
tatatgagca gtgaaactat agatacgtag agtcattcag gtttagcctt gtctaaaaaa 240
acattaataa gttatgggtgc agaggagtat cccaggggtt gccaaagaga aggctgatgt 300
ctttagatgt cagtatgaaa caagcaaate actttcaaga catggcttac tatttgcttt 360
actgtcagga caacagaaaa agaagtgggc agctacccta gattctagct cacacataat 420
tcagccngat aatcatcatt taaataatac cccttggaat ttttcagact tttcacaggg 480
tcttaaaacn ccaccatcng acntaacatc cacattgttc caaaggacta aaatcaaaag 540
catttgca 548
```

<210> 8466

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8466

```

agaaaaggtg gaaatggcct tttatttaaa tatgaggaaa aaattagaat taagtacagt   60
aagattatatt ttaaaaaagc agacaagtta gaacaaacat tttattatta aaataaactt  120
ttgtataaaa gcattacaga tcaaaagctg tatttacact tatcgattca aggtccaatt  180
atgcatcaaa cattgaatgg cacagcaatg gtttacatat gcaagtaaat tggacataca  240
aacacttaga ttccacctct accaaatacc ttgattaatg caaagaggag ggggaatact  300
gacacaggaa acctgcccag aaactagact ggcagagatg tcaggttaac aaactgctaa  360
aagttacatc ttcaaaaagg cacttatcat tgntataaaa gtgcttaaaa tctaaacttg  420
aaccttgngc ctggnttata aattaccaga aactgcaagn acccagacta gttttaatat  480
caagttccat ccaaaatggc cagaatttat tgcatacctt catgtgacng gaataacttg  540
g                                                                                   541

```

<210> 8467

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8467

```

gctagtttag tgtttgcatt tattttaaaa atacacaaaa tagaaatttt tacatcaaag   60
tgtgataacc tcacttacac attgttccat acttacctgg ttttgtttgc atctttctgc  120
aaacattaaa aggagatgga tttgattctg atttttttgc tatggttcat gtaaacagtt  180
gagactgcta cataaagtag gttgttgtca aaggtgaagt ggccacagaa tccaagaat  240
agaataattc aatttggttt aatgaaattg gtggaggtct tagcagatag ataatccaag  300
actaaatatt gtcttctagg cattttaaaa attaagaact ttgaggtttt cttcatgttg  360
taaacataac ttagaccttg gtggcattaa gtttaccaaa gaaaatatta aacctgatt  420
ttatcatcct ggcccatgtc agtatcacac tctttattat gagaatgaaa nccaantaat  480

```

aagccaaatc catcaggaat tcaaatggnc tggcaaagaa ggtcccactg g 531

<210> 8468

<211> 459

<212> DNA

<213> Homo sapiens

<400> 8468

gctcataaac aatattatatt tttttctcag tatgtgccct tgaagattcc aaaatgttgg 60
agtttctgat tctcctggga tcaaaggtaa aagcattgta tggaaacact caaccttggc 120
tcattaccct cctgaggagc taagtctgga ggcctcagag agagggagct gacattcaca 180
acttattcca agatgggtaa cacagtgaac aaagaattag taaaacatag actcagictg 240
tagagggctt caaatataca tattctatat atataaacct gttatatagg atttcaactt 300
attggtttcc ttgtgatttg taattaacgt acaaattata aagatgttgc aacttgctga 360
tttcccttc ttnagcccc cttccttccc aacntaaat accattccaa anggcangng 420
gatcctaana atttttggtg gtgnaaatat ttgtgtttt 459

<210> 8469

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8469

cacattaaaa aaataggttt aatgcaggtg ggtcatggca tgacgaattt cacaggcacc 60
ggggacagca ggcggccagg tgctcanagg gcaccaaggt gccacaactc cctgcagcgt 120
tgacaccgca cgagcggcac caccagcccc ctccgcctc cgtcccacc ttcaccctna 180
gccaanaggc ttgggtgact ctgagtaata cgtaacaaa aaacaaagct tntttgagga 240
aacagcatga cttagtcaa aagattctnt gcagcaagaa atgaggccca cgcagggaag 300
ctcccgcta cctgcccagg gcgtggacgc agccggggt catcagaggt catccacaga 360

agctgccgat naattannag agccccggtt acggccagaa aatttttgct ttctctacct 420
gatttaaggg ttttcaaaaa gtttctcttc cattgggaca caaatgggtnc tnntggnttc 480
tggggccact tgttccgcct gacaggggta angtcncag gtccaacat tgcccanaag 540
tgtgg 545

<210> 8470

<211> 517

<212> DNA

<213> Homo sapiens

<400> 8470

gaactttgac gagcattttt tattgaacag ttttattctg ttttagaata aaaactttgc 60
ttaaattattg taaggggtac tgcaggtatg ccatgctgcc agttattgct ggggcacaaa 120
acgccccagt cagtgattcg gagggctggg aaaacgcata aactcataat ttcagagcaa 180
gtagaactag tatttacagt tttctttctt gaaattggcc cgggacatct ccaacagtct 240
acacatgtat tgccatggta cttgctctga tgctctgaat gcctcggaac tgtgttcaat 300
atcatgattt gtgggtcctc taaaagggtt tgttggttaac atgcaagcaa acagcactga 360
acaatattgt ctaaactatg gctgccaagt actggatctt cataatgaaa ccaaattacc 420
aaacactggc ttgtagagct atncaaagat ttaaatgaaa ataaaaaatg tcaacagnct 480
taaattattca attctctaca gngcagttct atttttt 517

<210> 8471

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8471

gggcccgtac attatgaaga cattcgggaa aatgaggccc ggcaacttgg tgttgggtat 60
tttgcctttg cccgagacaa agagttgaga aacaagcaga tgaaaacctt agagatgctg 120

cgtgaacaga caacagatca gagaacaaaa cgagaaaaca taaaggaaaa gcgaaaggct 180
 atcttagggg caagacttgc caaacttcga caaaaaaaga tgaaaaaatc aaaagaaggt 240
 ggaacagaag aagaaaatag agatggagat gttattgggc ctttgccacc ggagccagag 300
 gctgtgccaa cccacagtcc tgctgcccag agtagcaaag tagaagtcac tgtccaggag 360
 aggaaggaca ccaagcctgg agtgccacac atccgggagt gggacccgcg ggaaaagaat 420
 tttccttttg gatactgggc gaaaaagcag tcagatctcc gggcttaaaa gaaaatcctt 480
 gagttttgcc ccgccgtcag aatacnttgg ngggtcanaa gaanactggg ttttccaacc 540
 agccaggctt ggnccaaacc tg 562

<210> 8472

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8472

gaatctttaa aaattctatt tgagaccag cacacaagaa tacgatagat gtcctcaaat 60
 gggggcttgg ctcacaggtg gaaggacact aaattgggtc catctgattt cttgaggcaa 120
 gggttgaacc tggtttgcac aaatcacacc tgtccaaagc aaccacgagt tctactattt 180
 tgcagccctt gctgctgggc gacgacgacg acctctctgc ctcttcttc caccactaca 240
 tcgcctcctg gggcagcttc tccctactcc accctgtata cctttcccag aatacagaac 300
 ctcaggccaa agagagatgc cagccccatt aatcacctct actgtacccc aatcatatta 360
 cgaaaagtca gaccaggaa aacaaggact taaaaagcca cgcttatagg gcaaaattcc 420
 gnttgctggc ttcaagccct tatttcccgc ttaaatngaa nggctctgga ttatagcccg 480
 cantaaattt anngcctcct aaatatnggt tgt 513

<210> 8473

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8473

```

ggttttaaga agtaccaatt taataatgaa tacttagaaa tatggtacac agataccata   60
gtaatataaa atgcatacaa ttttaaatta ttttcttata aactctctac atgaatggct  120
ggcggcttcc aacagataaa cttttggaca aaggtacaag atatttttgg gcattcattt  180
taaataccat ctagttatcc aattaggagg tttctaataa aataaatatg acaaatatat  240
ggatttctga agtataaaact gacatacaaa tctatatatt ttcttaatac ttttcattaa  300
agcatcttta aagcattctg taacatgaag ttgagagttc aaattagatg taatgaaaag  360
gcatgagggt ttattagaac tgtgtaattc acatatcaaa atttttaccn taaaagttaa  420
ccaaccccaa atttgaaagc naaatacggg attttactct tccaggtacc aatttcagaa  480
aaactactcc tgggaaaaat taatattccc aattctgnaa ggtaatagga aacnttnt   538

```

<210> 8474

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8474

```

gtattatgct caaactaagg cattttatta gctggcttta caacttaa ataatcttgg   60
ctttcaaagg aacagcttcc actaatcca aattaaactt tcacaagttt acttgtttgg  120
ggaggggacat tcttatggtc accacaaaat acttttatta taaccttccc caaatctttt  180
cttagcatta actggaaaaa aaaaaaaaaa aaaagcttag gtcaaatatc aactgcctga  240
aaaacccaat taagttactt ttccttaaaa catgtgcagt ataattgaat caaaagagaa  300
aactgcaaat acattngct ttggccagaa gtagagttca tttcatgatg attcagtatc  360
ttcagatact atttttgaca ctggccataa atcttagcaa agtaaatcca tttattaacg  420
tttcaaaggc aaagttgggt ttaacattag actttctttg gcaactggca acttaaaaaa  480
tttgcanang ngattattna aacctntttg gagctnaatt tagcttttaa   530

```

<210> 8475

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8475

```

aacaaatcca aagtttaatt attaaggatt acaaataatt ttagcagtgt agttaggcaa 60
tccaagcctg gacttccact tcattcctac taaactactt gcagagctga ggaggcagga 120
gactagagta cagagagcat tttagtttta tcacaaaggt ctagaactgt ctctacagtc 180
acaggaagaa acaggtatgg caccgtggcc agaagggggt aggtattcac agagagtggg 240
tatcaagggtg tcaaactttg tcttctgata gttttccaga gattcctgta gagaaggagg 300
caggagagc ctactatccg aaaccattcc ctgaaccctc tgaattctga agcatgtgga 360
tttctcagtc ttgttctacc catccccctt cccagcttcc tgctccttc cactcacctt 420
tccttcccc tggccatttt ctccccatc agagtctaaa accaaagtcc cctatggtaa 480
tgacggactg acagagaccg gaggaccact gtaggaggga accngaata aacttct 537

```

<210> 8476

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8476

```

cttcaaattg cttttattat acagttgtaa tggattaat tataaacatc aagtctattt 60
tcacacaaat cgtcacgagt ncacactgat aaagacatgc gctgggtaag agtcattatt 120
ggtacataaa catactggga tttgggcata aaaacacagt atcaattaat agcttttagca 180
gtctcaaaat agacttcaac gacattcata tatatttcct aatttaaatt gtgttagaaa 240
cattgcatct actttgagga acaaattctg taacagaaga gggaagacag gtaggcaaga 300
aggcaggaga tttttagttg tatactaagg tttagttttg gcacattgaa agtatcattt 360
ttcctattag atttctgaat ttgtgaacaa acattaacag ttgctgttct ttaatatgac 420
ctcattcata ctatatttgt gggaaaatac aactttagtt ttttctggtt acttatttnt 480

```

ttaattttcc actattgntc antggaagga cttacccaat antttttaga agaaagaa 538

<210> 8477

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8477

gttcttcaat ttgtttctga tctacacatt caaaagatga ttcaaactcc tcattatcct 60
 taaaagctag cttgtccaca tctgaaaatt cacttttgtc ttgaagttca gtttgtcttc 120
 gataaagacc cactttctgc tccggagggc tggagacagg agggatggag aggctgtgcc 180
 tagactcagt ggggtgatgt aggggcattc tgtcaggaca aggactgggg gaagcaatgt 240
 gtgatctgcc cagaccttcc agatacattt cactttcgag gcttcttttt gcttttggaa 300
 ggggtgtgga agagaggcgt ctggaggaag tgccccgcg gagcctcgag gctgcactgc 360
 ctgtcagtgc ttccacgacg tcattccttt cttcaagtgt gccacttga ggctgctcaa 420
 agacaactct gncctcttca aaaatatggc ttttccgggn actggaaata atggtttttg 480
 aangntttcc accagggccn aaaatggggg ggctctttgc tgctannggg cctttggg 538

<210> 8478

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8478

cttttttttt tctcattaac aaagcagtca attcccttta tttttaaaat tttatgtaca 60
 catatgaatg atctgtataa tgtacattca atatagaaag ctttatatat ttgatagtgt 120
 atagaacatt tcacaattac actcatcttt tacataacat cttgacatcc atttttaaat 180
 tttttgcac aagctccttt tcattcaatt tggtaaagcc agttatacat actaatgtgt 240
 actgtgagct ttcagaaggt taatgattga ggatgccagt gaagggtgca gggacaaaac 300

ctaatagtct tggatggtgg ggggaggatg gccacgcaga cttgatgcag gagagggaaa 360
tattctttcc tggggaaaag tgacttagcc caatttttgg tgactgnagc tcaaccctac 420
agtcagtcta gttcaaaaaa aaaatttcca aaactaggaa gaaaggtttg gctttttgat 480
cacagtttgn aacngattta anggaccaat gngncttcat cccccngaaa aaaaattntg 540
gg 542

<210> 8479

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8479

gtcctgctgt tttcttaaaa actttttttt gataccaata tcttcttatg gtcagagtca 60
caggcattct agatgtagaa gcttaacatc ctcttttgga gttatatttt ctgacaaaca 120
ttactacaa atgtaccaag aaaagagaag gccagcctcg acctcgctgt ggcacatgag 180
ttatccttca acagggtgtag gcattttgag tcagagaggc ctggacaatg aagagacagc 240
acctcaggca gccttgccag gagccactgg gtttcatcct ggctgaccc agaaaaatct 300
tatggaagag aacaagaggc ccaagagctc tctgatctgc tgtcaaccag ctgcagccgg 360
gagactgcca aagcgcttgc agtgactagg cagcggccct acagaagccc gctgggaagg 420
ggattaccag cctgatccct tggctttaga agccngaaat ggctcaactt tacaacagca 480
nggnctgnca gggagggggc catgaccctg gaaagggttt ttccccttgi gggg 534

<210> 8480

<211> 487

<212> DNA

<213> Homo sapiens

<400> 8480

agatgaacac cgtttttctt tgtttattta aatttgggag ccaaattgga tggagaaggt 60

aatgatggtt ttcaaaatac agtaagtctt catttaacat tgtaataga acaatgaaaa 120
 ctccaacttt tacgtgaaac agtgtatagc cagtcctcaa ataactgcct tttgttcaac 180
 atcctttcct tgtaacaact gatgagaaaa agtatggtt tggtatacat catttctctt 240
 gaagtacaag ttttcaagaa cctattgaca aggttaagtg tgggcttaca gtttaccaat 300
 cttagcctca gattgggcta gggcagggat gacaaaccag gctcttgcat gggctcttaa 360
 atggactggg caataaatga agactttggc ctgtaaattc ctaaatagct tctttgcttt 420
 tgncccttan gaatgcacag nctcattgnt acangccatc ttatggtcag tagaatcnna 480
 cccgaat 487

<210> 8481

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8481

aaattaacca gatctgtctt ttaatagtta ccagaattta gatgttaatt ccccagagga 60
 aaaatgtcca tggcacagtt tttctggaaa agttcacatg tagacagtga agcttctgaa 120
 gttaggcgctc aaattagtag tgacaatctt ttttttaatc ttgaaagtcc ctagttttta 180
 agaaagtaga atccatctgg ggcatgtctg catcacaggg tatcactcaa gagtcatcat 240
 caggccaaaa agactctgaa gggaaccagg agggtttggc ccttgctgtg gaaagatgct 300
 actgaaagta taagagaaca ccctaattgca cgcgtcaggc acgaaaccg taccatgccc 360
 cgctaagaca tgggaccaga gaacacgtna acgtcaaggc cggtncanga aaaccattcc 420
 caagaccacn gaagctaccc gaggtcgaca ctgncatgaa aagtgttgct gaaccgcagt 480
 tnccagggct ttactggccg aacatnccta aggcacgggtt gggcttgtn 530

<210> 8482

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8482

```
cctttcacia aatggatttt tattgtggtc ataatggtt tctcagtgcc acagaaaatt 60
gctatgtagg gacaaaaaat ttttgatgg ctctgtaaag aaacatggta ggttttcaga 120
aatgagttgt gcaggaatgt ggtaaatgaa aagcagaaag ggtaaggga agagaaagga 180
agccaaggag tgtggtatgt acatcaaatg attacttttt aagcccctct aggctctgat 240
aaccctttcc ccaagtcaga tccaacaaa attcatcagt aactgaagtg attgtgctaa 300
cagatacata aagactaccg gagaaaagtg ggttgagatg ggctcagact tattgttagg 360
acaactctgg gagtcttgtg tctgtgccaa ccacgtatcc gtgggctacc tggagatgaa 420
gttctaacia cccagcacag aacccaaagc tgntnttcna cacctttggt tantngggga 480
aanctttatn ggggccca 497
```

<210> 8483

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8483

```
gaaaagtcac cacaatcagt ttaattaagt gcacagaata gcaatcaatc aatcagtcac 60
gtcaataaaa ataaaacaat tattttttaca tcaagtgtgc tttatttcct ccacaggtat 120
tctgttaaat aaagcacat ttatatactg ccaggccaca gctaaagagg attctttaca 180
gaatcaaatt tcttgtggtt gtcccgata caagtaaact taattttgat aataagaacc 240
acagcgatcg gaggcaatct gcctctataa ggtacaaaac tggcacagag gacaccatat 300
catacacagt aaaaatgctg taagttaaaa ttacattgta cagggctagg caaccctgtt 360
cttcccagac agccatatta aatgaaagcc actaaagtga actcttaatt acataaaaca 420
tatccattat ctggatgccc nttaaaggaag tttactggaa atgccagggt tttcatctgg 480
aggtttttgc ttgccccaaa nttaacctt taaanctttt ntggcc 526
```

<210> 8484

<211> 493

<212> DNA

<213> Homo sapiens

<400> 8484

```

aaaagaaaaa tgttaagact ttattcaaga tgtgtatcag gcattataac aaaacagcag   60
aacttcaacc tttggaatac tgtaatttta catccctttg atgcacagtc cagtatacta  120
ttttattaca gatcattcta tagggactac agacatgaac tagaggaaat gtgcacagtc  180
acaatccaga atatcagctc tgggagtgtg cactgtttgt tagaggatga agcacatcct  240
ttgccatttc aaatactgtg ccagggtggag gactaggaag gctcaaagat ggatcatggtt  300
gacaagcact cttatcacaac acacatggat agcttatcac ggagaacaca tttcaaaggc  360
cagcaaagtg agcaagctat tcacacaaag ccaggaggga ttatgactaa actctccagt  420
ttataagcac aagtnacat ntcacctctn agaacangng ctcaatggca ttacttaaag  480
gtnttgcntg gac                                                         493

```

<210> 8485

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8485

```

ctgtttatga cactttattg atgctggggg ggtggggagg agacctggag aaatatgtgg   60
gggcaagagt cccaggtgg ggacaggga agtggtgaag cctggccact actgggcagg  120
gaagacagag ttgccactgt atgcacagg gatgagcagc tgccggtact ccaggggcag  180
gtgccgctcc actagcacgt gcagtgaac ttggtcagt accaggccct gccgccgat  240
cagcagctcc aggtcctctg gcttcacagt cttgcggcca gcatgagcag caaatacctc  300
cagatcatca caaagatgct ggaaatattt atctaggcac ttctccacca tctcaagagc  360
cttcctctcc atgggcatct tggcatagaa gctaaagagt ttcacatagt gggctcaagt  420
ccaaccttgt ggggatcttt gccngggcct ggggcccggt gtcccgggcc taaggggatn  480

```

ctgaccacaa aaggttttga agctntgaaa ataaaaattga gcaccagccc ttgggcttgg 540
ttaanaaaact n 551

<210> 8486

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8486

attttagtag agagcgggtt tcaccgtgtt gcccaggctg gtgttgaact ctggagctca 60
ggcggctccgc tcgcctcggc ctcccaaagt gctaaggta caggcttgag ccaccgcgcc 120
cggcctcaaa acacttttct ccacttattg gccaaagacac attattactc cctgtttgca 180
agtgagaaaa cagaggcaca gagaggtag tgtttggaca tggtcacaca gccagttaat 240
catatgacca cagaggctgg atctcctgag ttttaaactg agctgtcatt cagtccatag 300
ccatttattg tctttcctcc cagccacggc gcctttcctg tgctcgtca tgagcttctg 360
tgttatgaag aatgaagcat caaagggtag tgtatggta actctggcgt cttcccactt 420
cgggtggctta ttaattctca agggcagnct cataggagag gatattcagg catgccagcn 480
ggtattgggt gnetactggg gtcacttctg gncctttaca ccagcctntg gggaaaagt 540
cttaccan 549

<210> 8487

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8487

aagtggccac tattttatta ataatgcaca taacatatgc ttatcattaa ctcttaaaaa 60
gattattatt taactataca agaactacca tacaacattt caacatacaa gttcctatac 120
ttcttaagat acacaataat attttgaaag attggaaatg tttcccaagg actttcctat 180

cacaaatccc cccagtaaa aattatagga actgtggaat atggctgcta atattctgag 240
 atgaatttag aaagtataag tattgagaga tggactttat tatagcacct gtagaagaac 300
 caaattcagg catttatccc atattttctg aaatatattac aaagctctta taacattttc 360
 aaataacatt taattttaçta agttctatatt catggcaaata aagaatcaga aaatttgagg 420
 atgctatattt ttaagttttt ccaatacagc ttaagctttt gggataaagc tggtttacta 480
 aaaaggatcc ggtctcaatt gngngngctc ggtctctttg gcaatttaga gccctgggta 540
 agcacatgca 550

<210> 8488

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8488

ctagaccact gagaaaatct ttatttacia taaatttcaa taaaatttgc ataaatatat 60
 tccaatgta caattttcac ctctgatttc ttcatatcat ttaaaaagtt agtctgtcct 120
 gttctcctta ttcctttcag acaccagtgt ggcgctgaca ttggcaggtg gaggggagct 180
 gccagggagc tgggggggtgg ctgagggctc aggctgcttg gggaggacct ctctctgggc 240
 cgccaggctt tcagctccat ccctgccctc cagtttctc tccatggctg ccaccaggat 300
 cttgagccac gtgttctcgg taaggagggtt ttctgaggca tcggccagct cctgcagctt 360
 gcgggccagc tcctgcagct cacgtggtct tctgctcata gagggcctgc actgctcact 420
 gtgtgcgtgg agcaagctgt gctggtcttc cangggcccc tgctgctgnc gaaccggggc 480
 tcaanttttc ggcaactggan aacttgggat tcanctgnac ttgggcnctt ggaggtggtt 540

<210> 8489

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8489

gacagtccca cacaaatcaa tttttaataa tttcaacttg ccaccagctc caaatccagc 60
 tgccttgggg atttatcacc agggaaaaca ctaaagccc caggctgagc tatccatcca 120
 gtgatcagat gaccagcct gtgatctctt aagaacctac atctacacat ggcagcctgt 180
 tagtggcttc tctggaacta gtgcatagct gctcaatggt agagccagaa ctctggttcc 240
 cagggagggc gagtatccca aagagatttg aggttaaagt gatggcagtc caggtgggtcc 300
 cagacatgct ctactgctg aattcctgca cttactccta gaatatacca gtgctgtttg 360
 ctcccgccat cctgagggct ttaaaaagng ctttaaaaag ggaggatctc gaagcancaa 420
 gctttttcaa angcactgtt gggaaagcct atagtgggtc catggaggct nttccaaggg 480
 aggaancnca agccaacttc ccataagtca ggggnatttg cctggggccc cnccaat 537

<210> 8490

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8490

gaggtatctt tggaaaattt aatttggacc atatcttctt cctctttctg aaaacatcaa 60
 atatcccat acagtttggg ttccacagct taaaaagggg cagtgggtt cccgcagtta 120
 catactgtac ccaactttct atagaaagat aaaacatttt ccaacctgc ttttgagtat 180
 ttcctaaaaa atgcttttaa gtttccttac aataaatggc aagtaaaaca aagtaaggct 240
 ttttttttct ccttttcccc tttttatgta ctgcatgttc naggaataag gaaggaagac 300
 tagttccatc agagtactag taatcctagt accctgggga ttactgctgg atcctcccag 360
 gtatacccct attattgagg ccctgatgca cccctgcact gaggaacctg agaagggtta 420
 gtactaaaca ggctgcatag ccacgtngga ctgttacaag cacaagggtg gactgggaag 480
 tcnccaagtc ttctngnggt taccaggagt accaanggac tnnggcttaa ccct 534

<210> 8491

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8491

```
gccttgaaat gttttaata gaattggtct agtaatcatt caggatttcg gtgatgggcc 60
ctccctgtcc ggacactgcc aaccacagc tggaggggca ctaaggcac gtcattttgt 120
gattagaatt acacaaaatt tgattaatat tatagctgca aaattaacat acacaatttt 180
cactcataat ttaaaatatt ttgatgaaat tctttgcttt cacaatagaa gatcaatggt 240
acacagtata ttgaactctg taacaaaatt atttttgaga aaatacagaa gtgagaaata 300
gtgatttcct caatttggtt atagtctatc acaaagtagg ccaaagttca gtattaaata 360
gatatcctaa taaaagtttt tacaagtttt nctaaggaaa tccattcata agactgnnta 420
ccttctggtt gacagcagtg acangaaccg tgggggatcc ccctnatgga cgagtncccta 480
gccttangcc ctggnaccca aggccccggg ggcgctccgt nacctggtag 530
```

<210> 8492

<211> 454

<212> DNA

<213> Homo sapiens

<400> 8492

```
gggcatatTT atgcagttgt ttttatttat ccaactgnaa agactgcagc aatttttttg 60
atgagtaatg ccttagatta acactaatta tattgctata aatttggttc aggatcagaa 120
tagggttcag gaaagggaga gaacaaaaaa aaaagtctcc aaacattaaa acagaaaaat 180
gctttttttt tttttttttt ganactgagt cttgctctgt ctcccaggct ggagtgcagt 240
ggcncaatct cagctcactg naggctccgc ctctgggtt caagcgattn tcctgcctna 300
gcctcctgag tagctgagat tcaggcacac gccacatgc tcagctaact tttggatttt 360
tagtacagac agggtttcac catgttgGCC aggctggncT tgaactcctg acctngngat 420
ccccccgnct aagcctncca aangctnggg attc 454
```

<210> 8493

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8493

```

agtttttagc ttctttattc atttgaacac ttcaatatc tgtcttcttc aatgattccc 60
ccttgcccggt attttcagct ggaacagttt ctcattttcc ctatttctga acactttcag 120
gggcttcctt cagtgaagcc caacacacaa aacgtccctt tcagcaaaat ctcagcgggtg 180
gtgctaaggg actaacacag actttaaggt cacaaaacca ttgttttaac atttttctct 240
gtttcttttc tgataatgat gacagtcttg tctctattat atttgctgaa acttactagg 300
accagtgat actagctcat cctctagaga gaggtcccaa gagcattaca ccagatctcc 360
tacgaagatg tgggatttcc tctaggaaaa ggtgtgtatc caggtaattt actaagccag 420
aagctgctgn gattctatgg cagccttacc ttcttatgac acgtcattta ctaagaattn 480
ggggatctgg atgatggcca anagtggctg gactnaaagc ctggcccan atggggggng 540
gg 542

```

<210> 8494

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8494

```

aaaatattta tatggatcaa ctttattgaa agtgaataaa cagagataat gnggcaaaaa 60
gaaattttcc caatattaaa cccttgatga tactttttaa ttactataa ggaaaagaat 120
ccaccagtag taggtagcta cttatttttg ctgagtgtcc tctgcttttc tgcattgtcc 180
acaatctttt ctccacata aagccccctc cgctttcgta ctgcgttcat gtacttccgg 240
gcttggttct cagagtcagc cttctcccca aagtgaagt attcctcctc agtagttggc 300
accagaagg ggtcactggg aatgatctcc caatggctga atactagttg tgggctggcc 360

```

aggccacttg ncctcttctg atttcatcag caaaaccaa gctttcagca acaggcagca 420
cagcttgatg atgaacatgt ctggcccttc tttcatttct tcttgaagac cggacctnt 480
cttntttgac aagacagctt agactcgacc gagaacatta cngtgggcat gatgtct 537

<210> 8495

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8495

atgtgttcaa aaaaatgttt tttttattga attgaatggg agctaaagta ggataaagtg 60
gagccaaatt ataaatagga atataggtag gagttcattc attcagtaaa tattttattga 120
atgcttattg tgtccaggcc ctgttctcag ctcttagaat acatccatga acaaaccaga 180
taaaaacttc tgcccttgcg cagcttatac tctagatcgt aagggatggg attagcaata 240
aatttacata aattcaacca tacctactgg aaaaagacac atgcatggaa attattaatg 300
ctataagaat ctcttgatat gcagtttgta tttttgnact taatataagc ataatatatt 360
catactaca tatcactccc agggttttaa actttaagac tacnaagaga aattttattgg 420
taatctaagg agattttcaa ggccatctga gcatgctcaa ttttggccct angcacggct 480
tttaaaacct aacccccctta caggtgngga ttccctgnnc caaatggaaa ctttg 535

<210> 8496

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8496

ctctctagta atgactttat tcatgaatct ataatggaat tcaaaatagc aaagaacatg 60
aaaatgttca gattaatatt tattaaccaa atgcatcaga aaatacatct attttcacat 120
atcaaaagtg cctaaaatgc atgtgagaat ataaatattc tccactttgt ggaacttcaa 180

gataatgaaa aattgcttaa tacactttgc cacaaaaact cattacactg caaatacaga 240
 agaaataaaa taactcatta cattgcagat caaaagaaat caaatgtaac tggcaaaaata 300
 accatttcat ggctaattct ttggtaaagt gctatittca cactgaaaaa aagaaattag 360
 aaaagattaa aaatttttaa ttctgaacca tcattctgaa agtctgaagc gttttcttta 420
 gtattcacta tggatcatcac attcatgngg tcccaccatg agacttaaca ctttctcaaa 480
 atcttaaaaa atctttcatt cncggattat tttcggggag gttaaaaatt ttncctcatn 540
 gtn 543

<210> 8497

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8497

aaagacaggt tctcactctg ttgtcctggc tgcagtgcac tggctattca taggcaagat 60
 cccattactg atcagcctgg gagttttggc ctgctccatt tccaacctgg gctgggttca 120
 cccgtcctga tgcaagtttg tggtttcctg cttcaggagc atcaccatat tgatgccaaa 180
 cttacaccca actggcatag tgtaccacag ccanaaactc ctgggctcta gggatcctcc 240
 tgcttcagcc tcctaagtag ctggggctgt acgcatgtgc caccaaact agcaattatt 300
 atttttaatc ttagaaaata aattgngtat agaaaggaat agttagcaca tttatgtcta 360
 aagaggaata aaaaaggga actgggggtt acacaaaatg cattgnagt actgattttg 420
 aacancctat caggtnatt caacaaaatg gncaggaga tgcathtagt actnaacca 480
 ttcagacatc atttncatg ctaactggn taaacctagt ng 522

<210> 8498

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8498

```

atttttgctt ctttttaatg taaacagaat acacaatcac attaaaaacc ccaacatgac   60
acagaataca cacagaatta tatatagata ttacaggcc ctcgaaagcc aaaaggaaaa 120
atggcccctc tggttaaggg aagcttctct tcctacctg tccctgtcca aaatcaaagt 180
gctgaggcag ctgaaggagc ctccgcaatt acttctggat ataatgtagc aggaggctgg 240
aataacatca gaaacacccc acccccaccc cagagcacia ccaagatacc gactttctgg 300
ccctggccct aatcctaaac tctctctctt tgcaagctga caaagcaagg atttgtatgt 360
ctcgagaggc atcagcatga cccctgaaat tcagatgcac ggcggagggg ttcccatccc 420
attccagctt tccagccttg ggctgattgn gaaatgagcc aaaaccaacc attttccaaa 480
aaagaagggt ggggaaagta aaggaagaat ggatcttaag gcnnaaataa tgg      533

```

<210> 8499

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8499

```

cagattccaa aagagtaaatt ttactattg gagtacagtt agattgtaat cctcttgaaa   60
cagatacttt ttcctttctt aatcacctag atgacaaatg taagacttac ccctgacttg 120
gtccattgat ttgttcattc attaatcaa caacatttac taagtttctc catgtacact 180
ggactgctca aagctctata ggagatacag taatgtgctt tgctgcctct gaatggagca 240
gtgtccctcc cagcctatgg gcatggctaa atttitagaag gattcttctg cttgtcttca 300
actcaaaga tcagcctgaa cacggagtga aatcaccagt gttcctggca ggaagagacc 360
ctgttccaca cccaacacat catcctaata gtaggctttt gacacagtcc tattaataaa 420
tgaagcatgt ctctgtctaa gtttatataa tcagtacttc ataattcaga aactttgcct 480
ctcanaggtc gatcagcagc tcangtgagt tcctataaac cagtttggaa ggaatact   538

```

<210> 8500

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8500

```
cctttggtga gacaggggtcc ggctctgttg ctcaggctgg agagcagtgg tacaatcaca 60
gctcactgca gacttaacct ctggetcaag tgatcctcct gcctcagctt cctgagtatc 120
tgggactaca ggcggttgac accacgcacg gctgactttt cttgttttgt agagacaggg 180
tttcacccat gttgcccagg ctggtcttga actcctagcc tcaagtgatc ctcccacctt 240
ggcctcctaa agtgctggga ttgcaggcgt gagccgctgc gccagcctg tttattttca 300
cgctcacact gccccaggct ggccaccgta tgctccttcc catccccccg tgttatttca 360
acaagtctcc tcateccagc aattcttcac tctctagctc atctgatacc ttctctggcc 420
tggccctggt tccttttggg tacagaatgg tatcagggcc aaaaccctga gtgcaccggt 480
caatngttc aggnccctnaa aacttggnaa catttgggca caagccctta naaaaagncc 540
cct 543
```

<210> 8501

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8501

```
cagataggca cacataattt agattagaaa tgaaaatggg ctttaagccc tataagtatt 60
gttttccaag aaaataagtt ttgaaagtgc aaaatgacaa ctcaaaaagg tcccctttcc 120
acctcatgca ggcaaaggac atttaaaagc acatccaact aaatcaaaaa agggaggatt 180
agaaatcaca ctagttcatc cttcattatc agggctggct tcaaacctga atgtttctga 240
gtgggatatg ttgcaaaaaa aaaaattaaa ctagatccaa gttacatttc ctctaaaaaa 300
aaaaatgtca aaggacagct gccaaagattt gtttttaaaa gacaccttc aggtaagagg 360
tagtgtatgc tagctaggac tacaggctgc caactcaaca ttgcttgaga acattaagtc 420
cttgaagca tgttccttgg agtctattaa acattctttc tctggggtca aatgtcaagc 480
```

catatccaat agcatcttct ggttcntgga atccnttctn ggaactggat tcatccttgn 540
aaa 543

<210> 8502

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8502

catggatttt tttcccccat tggctttcaa agcaagtgag ataaacagcg ttactggcag 60
atattggtca taaataacat cttcccaaag cccaacagtc aaaaaacaaa caccaaatat 120
aagcagatta ggcagatttc ctaaatactc agttaaggct atggtgtgct tggttttgac 180
cagagcaatt ctatggcttc cttttatttt tctccctgga taaaactatg cttacttgat 240
ccatgcaatt tcagttgtta cagctttaac ttataagatc aaaggaatta aaaagttgtc 300
agaatagatt ttcaaataat gacaaaaact gacataaagt ctacacagaa ctgacataaa 360
gtctacacag tcctcagga tatggataaa acaaatgaag tttcatgact ggaagggggc 420
tcccttctaa gtaaataagn catagaaagg tatgtaaagg cttttttcat gaaggttcca 480
aaggggaaaa ntttaaacca tgggtcaaga acnctggtn ctaaattggn gaataagggg 540
ng 542

<210> 8503

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8503

acatttttgt gttgttttat tatatgattt tttaagttac aaaaaaaaaa aagagggaag 60
aaggaaaagc aataaggcaa acttgccaat aggttcatga acaaaagtca attatggaat 120
gtggcagaag gcaaataata atgtattcaa agttttacct ttaacaatta cacttgtggt 180

tccagttatc tgttgataat ataaattact ccgtatttag tgactcaaac aacaatttta 240
 tttctctctc atgggtcttg agtttggctg gattcagcta ggtagttctt gctgagggtc 300
 attcatgggg ttgtcatcgg atggtggctg gtgatggaag catctgaaga cttactaatt 360
 gcagccaggc atggtggctc atgcctacaa ttccagcact ttgggagact gaggtaggag 420
 gattacttga gcttaggagt tcaagaccag cctgggcaac atagtgagaa cccatttcga 480
 attatttnaa aaaaaaant taaanccaaa aggaantgaa ggcttactac ttgcntattg 540

<210> 8504

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8504

ggtttcaaaa ggggtgtgta ctatttggcc aaacaatatt ttntaattgt cagtcataaa 60
 gtgaaataca tactaaaata tatattaaat attcaccaaa tntgcattgc tgctacatga 120
 aaacattttt tggncgtgtg gaaaatgtaa ttcttgagat cattgttggg ctttgtcaat 180
 cattttcctc accatcaaat caccttaagt gacttgggag tgtgaatcta ggatgttcaa 240
 ttttagacca attttctcta tcttctaaat gagtaaacag gctctgtctt ttataaaagg 300
 tagaaaaata accatgggtg gctaattttt ttcaaggtat accatatgga aaagtatagg 360
 ctgaacacaa aggaagtctt ttctgaatgg ctctcaatca cacataagga acatatgntt 420
 tccagttaat ctgtccttga tgtacagcag tncagctgtt gctttgcctt tattaataa 480
 ttctctgctt aaaaagttat ggttgcttta aaaggnaatt gnccttaaaat tccttcant 540
 tn 542

<210> 8505

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8505

cataaaaatg taagttttat tgagtgccta tagtgtgcat gggcctttat tagacacgcc	60
aaattcaggc acaacagaca caagatccct ggcctcaggt accttatgat ctaattaata	120
gatattagaa acagtagaaa gacaagttac acgtcaatgc ccaatgacta gagtcaacat	180
taaagagttg taattttaagt aatccaaact gacatctaata tccaaaatca tttataaaat	240
gtatttggct ttggaatcca caggacttca aacaagcaaa gtttcactgc agatagtcac	300
aaagatgcag atacactgaa atacttaaga gccttattaa tgatttttgt tattttggat	360
cttctgnttt tttcttatta tgggccgaag cctccttaata accaatttat cagacagaag	420
catgtcatct tgggtggtaa gataatccag taaatttcag tccattcaag tgccgcttta	480
tggctaatat gcttctctgg atcagtctgg tttctactct tactggaang nttttgctca	540
an	542

<210> 8506

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8506

cttaagacaa tgatttttat tacctttagt ctaccacatt tgtcactata aatatactta	60
ttgaaaaaaa accatactat ttaaataaga attcagttca tgaaagtta caaaatacaa	120
ccaatgtact ctgacttggt gttatatctt aactatctca actgtacttt tctgggtatgg	180
ccagaccttt tgcaaatatt accatgggtat ttttaatttta tgatataaaa cagtagcaat	240
ttattaagtt ttccattata aaaattaata tggcaattct caaaatactg aaaaaactgt	300
tttatgaaag cagtaccac atcactgcaa cgtatttcct ttctcttaga aaacatcttc	360
aaaaggcaca ttttaattac tagtgtttat atctaaagat agtagtttga gttttgaatt	420
tccgtcaatt ttccattatc tcaaaattga gctaattggag ggttggaaga ggtaggagaa	480
cgcanggttt caatggactt cctnanggca gcanaatccn attcattttg gccctgggga	540
nc	542

<210> 8507

<211> 174

<212> DNA

<213> Homo sapiens

<400> 8507

```
gattttaaaa aatgtatttg tgttttgcag gttggaacgc aaaccacgtc tggccacgtc 60
ccgtgaagtt gtggacaaaa tgtttcagtt tctgttcacc tctgtgcgtg tgtgtgtatg 120
tgttgtgtgc atgtgtgtgt gtgtgggggg gtgggggatg gggtcggnnn nnnn 174
```

<210> 8508

<211> 312

<212> DNA

<213> Homo sapiens

<400> 8508

```
gtatTTTTTT tttttttttt ttaccatta aaaacagtta tgaaatgtgg catcccgttg 60
atgcaaggac tgggaaagcc atttttattt tttttttttt ccccaaactc actgtaaaca 120
acagtaactt tggttaaaat aaaaaaagtc ttctatgtag gcagagcttt gtcttttcaa 180
agagggtggg gtagggccct gaggggagta aggtgaggac aaggacaga aaggcgtgag 240
gtgatggagg gaggggaggt ggaaggagga nagagaaaca ggnnagactt tttcccangg 300
ganaanctgg nc 312
```

<210> 8509

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8509

acatgttcat accaacttta ttcattgatag ccccaaacta gaaacagccc attgttcacc 60
 agtttagttgt tcacctaaca ggtgaaacgt taaaatgtgg cattcataca tagaacactg 120
 ctcagccata aaaaggaaca aagcttaaac aactgatga acatacaaac atgctgagta 180
 aaaggaactt acagaataca tactgcataa gtgagtcctt tatatgaagt tctagaatag 240
 gcaaaattaa tctacagtga acaaaatcct aacagtagct gactgccagg ggaggggaaga 300
 agggacagga gagagagggtg caggaattga ctaggtgaaa aaattcagat gtaatacaga 360
 tgttccagac ataggggttt gagttacatg cttttacatc aaaactcatc aaatgagtct 420
 gggtatnggg gntcacacct gtaatnccag ctactcggga ngcttaggca ggagactccc 480
 ttgaccagg aggtggaggt tcantgagcc cagancaggc cctggacttt taccctgggg 540
 gatn 544

<210> 8510

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8510

cggggtgaga cgggtttatt gtgcacattt acacagcgtc agcagcgtct gggctggcag 60
 cggccatgct cctgtggctg ggctgctcta caaggcggtt cacttttctt caccacacta 120
 tgtacagtca gtgctccaag gtgatgggtt acagtgtgc atcagtgagt ctgtacacac 180
 atttttacat aaattacaca cgactcatal atgaaaaata gagcctaagg gcctgtattt 240
 taatgagaaa aaaaaaattt ccaacatagt tcgggtagct ttgaatggct tagtcaaaaa 300
 atacttttgg tatataaaaa gcctgtccgt acaattcaca ccttagtgaa agcgcccttc 360
 ttgccttgag gctgggcctg ggacaaaggt ggcctnaca gccagcccag gcagggagat 420
 cggcagaaaa ggggtggccc tgaccccagn tncntnggcc cagctgtgc tccttggtgg 480
 gcgggccctt cttgacacca ggcgtntggc atccttaagn nccaaacaag ccccgtttac 540
 tggncctggc tggccttaaa caatccaccc t 571

<210> 8511

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8511

```

aatgaaaaac accaatttat tatacttatg atactgttta ccaggacctg agcaggctac   60
ataggagttc tcacatgat agccaaacct taagctaaat aaatacacia gcatgtgtta  120
cttatcaatc tgaaataactt cttatttaat ctatgtaata taaaaatcat agtaattctt  180
tttattgaat ataacaagaa aatatacagt acacatacag ttcaaagaat tatcaaaaaa  240
cgaacacacc tgtgtaatct ggtaactac ttcaagaatc agaacattat cagctcccca  300
gaaacctccc tcatattcac tcctagtcac tacctccttc ctcaaagca gccactatcc  360
tgacttctaa aaccagagac tgggtcatgc ctagttttca gtttcatatt aatggaatca  420
taatatgtgt tgnatggctt cttttgtcaa cattataaga ttcacttaca atggtataca  480
tagctgtaat ccggtactgn tataaggcag gctacatcta caacntaagg cttttaacaa  540
tgnactgggt ggtctacatt angntatccc a                               571

```

<210> 8512

<211> 529

<212> DNA

<213> Homo sapiens

<400> 8512

```

agccacaaac tctcggcatt tgagaccgtt gatttttaat attttcttaa aaaaatacaa   60
aggaaattaa ctctgtaggt caatacaact cagggaaga gggaaaaatg gaatttcaga  120
gcaaagggtg tttaggttat cacattccca cactcctaata acccacaaaa caagaatttc  180
actccatgac acagaggaac attgaatggt agctcanaaa tgttgatagc tgaggtactg  240
aaactaacia aaggattttg gttgtccttg attattctgt cctgtgatga ataaaatcta  300
cactaaagga caggtaagga aaacttatag cagaaaaaag actagatgta ccaaacacag  360
cagtacaaac cactccttgg cagacatgtg cttctaaaag aatggggcag taatcaggta  420

```

gctgaactac taggctnctg ncactnccag cccattccca aataaatagt gtggaaatgt 480
aatagnгнаa tagtatttga tcccaccaa aaangntttt aacccatt 529

<210> 8513

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8513

atagaaaata aaattaatac ttgattttat taagggtggtt tatcacaaca aataccaaca 60
agaagagaaa aaaatctcag gaaaatcaac agcatgcatg gatttggaat gacactatgt 120
aaataaatgc aatgaaataa aattgacttt tcaacacttg gacagcatga agttcaacag 180
acaaatccat taaaaaggga aataaaagct caatctcaag gtgaaatttt tgtccatgac 240
actctcgaat tctagatctg aaaaagtttg ggataaatgg cagaaaacaa cgcgtcatca 300
cgagatctct aatttaatcc aaagctattc cggaaggcag cagttttccc tatttcttca 360
ccagcgccct ggggcaaaag gttaggaata atcggcttca ggaacttgaa ctgcccggcc 420
cctgagtctc cggtaaaca cacctcgtag tggtagctct gggatagggt nccngtgccc 480
gntcacgtcc ccagatgccc tggaaanggg cccttgcccc naggcancgac ccgaaccggg 540
gccgcctggt cctctggana aaccga 566

<210> 8514

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8514

acttttagtt cacatttttt aatgtttaaa aactatgtta acagagcagt tatagaacag 60
aacttcttat atttctttat ttacaccaca ctctgaaaaa aaaaccaggt tctatttgat 120
taactatgaa tagcaaagtt ttgtgacttg tgactcactt aaatcaccca tctgaaattc 180

atttacaagg tttttacatt aataaaacag tagtgtggta catatatggg actcagatga 240
 agtctaaagt acactggact ctagagagtg gattacatac caacgaccaa gattcaagtg 300
 tttggggaaa aaaatacctt agacagtcta tgttggcgtc aacactaaaa tnaaaggcaa 360
 acatgcagga ctttcaaagc ttgattagat aatggntcctt tgnntctttt ctttcaaatt 420
 tgtgctcata attaatatc angttccctc ttnccgnttt catagatncc caaagttgag 480
 aaaatgcagc aattcaattg ggaaaaaac attcttctnc caacttctgg tttcatatga 540
 ctggggaatg gtatcaaggg taaaaag 567

<210> 8515

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8515

aaaacataag tatgggtata tttatttctc tcaaatgcat acaagacaat aattacacag 60
 caacaaatct tttgttcaac aatgatttga ttcataagca tttgaaattt acataatttc 120
 atatcaatac ccttgtatctt ttaaatacag taagtaaaaa agcccccaa taaccaattc 180
 ttatatttcc tatttatccc tctatacatc caaactttta aaaagttaca aactgaacat 240
 tatacagaac atataaatca tgtttaaaaa cttgaggttt taaaatcact gcttccccaa 300
 tatgattcag aaaaattctc atactgacaa gtacagtcac aggtggtaaa gtaagttggt 360
 ggcggggaaa atgaaagaag agacagacac aagtttgctg tcttaatgtt ttactaatcc 420
 tgtcagttaa aaatggngac gtcatgagaa gtaatagttt aatatgagga atgggagttt 480
 gccttgcagc ttgagacatg catttcagga tttttcctat tggactgggc tcctggagcn 540
 aactngtgnc cnaaaanaaa ta 562

<210> 8516

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8516

```
ccaggtacaa cagcaggttc ttttccaatt cctcaaagcg ctgcatgggg tgggggcaga 60
gacagaagag aatgtaaaca ttgggttcca cccctggag ctcaaggga gacccttacc 120
cagataggga ctaactggag ggggtggaagg gaacaaggtg aaaggtatgg gtcctgggtga 180
gacaaaagca ggggggcctg agaacacaga gcaaggtggg tttggaggga gcacagcagg 240
gtgcaggaag ggagatgggg gacatttcct attccagtgc atgtcccctt aaataaactg 300
ggtacaggag cattatggaa ggagaaccaa aggacagaag acaaagcgag cccccccacc 360
ccaggccaac gccatcctct gtacacaatt acaacacagg tccagaatga gaaccctgcc 420
aggaagtggg ggagacaggg agggctgaag acagggaaaa ggaaccagct tcacctnatg 480
gtaaagggga gctntggagt gtaagaatct tgaaacttgc tgacttccat taaccaggag 540
tcanccttg ggattacaac cgggccattt anggacagct 580
```

<210> 8517

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8517

```
gagatttctc ctactcacct caaacctct aagactgcca aaagctacgc cacaatcaaa 60
ttctgcaggt tctttcaa atcatttcac ttagctcttc tacaataaag cctcactact 120
caaagtatgg tccttagaat agcgatcatca taattgtttg gaatgttatt agaaaaataa 180
aatgttttct ttctgataat tgaaaatgtt cctcttcaaa gcattttacc aaagaagaca 240
gtcaaataac caataaacat atagaaaagt gttcaagtta attacttgct agggaaatgc 300
aaattatagc cacaagaggt gtctctgcca tccaccagaa tggctaaaat gaaaacacaa 360
aacagacatg tcaagcatcg ataatgatat gcagcaatgg gagttcatgc gctaggaatg 420
ggcaaactgg taaaactaga aaactaattg gcaatagcta ctaaagntgg ccaaagggga 480
tctatacgac cgggcaattc ctttccaaa atttccccac ngaaaggntt tttttgcttn 540
c 541
```


<210> 8518

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8518

```

ccaaaattgt gctttattaa atgctagttc attggaatgt taatacatgt ttcacacaca   60
caatcagcag gagaaaatgt ttctatagcc aaatgacatt gataaacagt gttcttacac  120
aaagttaagc ctgtttcttt attataagac ttttcagata ctttcccagt gcatagtgtg  180
aatctccaca aagcaagtga aacatgaata gctccctaaa cttacttgac cacagaatgc  240
ttcattctat ctccatggaa accacttggt aaagtctcct actccaactt tcttctccaa  300
caaaactcac ctgtttgtga tcatctgaac tcattttgtg ctcttgctt tatataaaag  360
agaagttctg tgaaatgttg aagaagcagg gttatggcac tagtaatgat ccaggcctat  420
acaaattggt aaaattttcc attatttttag ttcagaagcc ctacatagg tattctaaca  480
gtggattgtg ggaaccctagt atgagtgggt gagacatggt tccaaaatat aggagctntt  540
ttaaaaagga atcccttaat aataccgg                                     568

```

<210> 8519

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8519

```

agtagaaaaa ataccttttt attaattatt aggaataatc cattcatgta atgcaggatg   60
tatgttggag aagggttaagt acagccacat gaatgagggg aaacgtgcaa gaggaacagt  120
ggtgagaagg gggatgggtc cccactttcc acaaactata aacagcaaca tgaacacaga  180
gaatcacaaa taagagggtc tttcctcatg tctcctctca cccattctt ccataatgag  240
tcccagttgg tccctagagg tgccagggca tctggaagtt ctgggctggg agtgggggtgc  300

```

agtgagtggc ctcaaagttg tgcagatgct tccgagccag aaacaaagcc agctgccgcc 360
gtccatctgc actcatgtct tccccacgct tcaaggggaa agtcngggccc cngttctgcc 420
tggtaggaac cggaggacag acnggacacc agtcctnttt caccttccat cggctattaa 480
attggggctt tcttcancct gtgaaggang gcttcaacca ctggcttanc actcgaagac 540
cctctttggc ataccgggg ataccgatgc ttgaaggac 579

<210> 8520

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8520

caatagaaat taggtagatc catttat tttt ttaaatacaa gtataat tttt ggaaggggta 60
tttgacaaat tcagcattaa ctgccaactc tatagacatg ttttaacaaa aagcaaaaaca 120
aaacaaaaca aaaaaacaaa acaaggcatt tactcttggc cttttcagta caggcgaagt 180
gttctattgc atcacaagtg ctagtgatgc agtaacagat ccaagggcatt aatattaaat 240
atgttttttt ccaactgcga tttagttgaa aaataacata atacaaacat atattaatgg 300
ctatcaagac cagcagtgat ctgcagaata cctagaggcc tacctaatta gaagggtgaa 360
acttagtaaa accgtattaa agtcagtggt tttattctta gattaacaat gacagagtga 420
agatatcttt gattcaattt tataagggtg ggtgggggaa ttgagaggag cnagatttgg 480
ggaaaactgg cantgggtgc tgagttaant tngggaatgt gggtaaata agcnaatntgg 540
ttaggana 548

<210> 8521

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8521

gaggtgatgg atagattagc tttatttaat cccacattat attcaaaaat cataatgccca 60
 ctttgtttct cataagtata tacaactata atttgatata taataaaaaa aatctaaaaa 120
 ggtagtctcc taacaatcat atgaagacta tcctaaaatg tccttttagta actgtcatgg 180
 actgaaaagt atcccacgaa gagacaatgt ctactcagat catgtgaata caaacttact 240
 tggaacatgg gtctttgtaa acataattaa gggctctccag acacaatcac cctagatcag 300
 ggtggggcct acattcaaag acactgtcct taaaaggtaa tgaagagaag acagagggaa 360
 aggccgtgtg aacacagagg cagagactgg agtgaagatt gctgctgcaa tacttggaca 420
 agatttgtcc agaagccaaa gaactccagg aattgcccac ggccccagat tttnggaacc 480
 gccnttnaag gccggttatg gatcttcctt aaggctcnna agganccact ttgtgacctt 540
 tganttaac 549

<210> 8522

<211> 414

<212> DNA

<213> Homo sapiens

<400> 8522

gcactttatt ccgccacttt tattgagcaa cagccgtggg gacctgattc tgcactaagt 60
 gctctactgt gagacatcac aggttgtcat tgctagaggc aagaatctct taaaaagatg 120
 aaagggcaga acccagtgtt ttttttaatg gttgttattc catgcagaaa cactgactga 180
 tccagaactg gtaactaagg cggtgatcaa acaggaatgc ttttcttctc agtttaggac 240
 gaagacccgc catgacaatg gcgggaacgc tggagtaaaa cctcacggcg gccagcatgt 300
 agtttttcgc cagatttgtg gccccacccc caagtaccca cgcgagagg cctccagtca 360
 tacagcacia agggcatcgc cttgggcagt nnaggctcac tntgtncnna nctg 414

<210> 8523

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8523

```

gaactttaaa actactatat tatacaatag taaagcagca gagtatctta cttttatata 60
attatataaa aacttatattt tatattgtta cattgtgaat cacattacaa tttagtctcc 120
ttttcaatag aaagattttc taaggacatg atttggagcc gtccacattt atcagatgcc 180
ttttcattaa ttttttccat ttttgcaatt ctgcatccaa actgcatggc ccgtttgggc 240
agaagagcag aggctgtaag accaagttcc acagctgcaa ggcgtaaaag taatttttca 300
ccaattcctc ggggtaaagt caagtttgct ttttcccaa tcggcagaga atttagaaag 360
gagacaacat tttcatccag gaaaggaaat ctgcttctt ttccatgac accaataact 420
ctgtcatcac gaccaagatt ttaggaagaa attcgacca gttccatcat tatttcttat 480
tcaatccttt cagcccatgc gactggaagc ngacccgatg accagaatac ctggaagggtg 540
ctcattgnnc catttcngng ggactacctt gg 572

```

<210> 8524

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8524

```

atgctctttt tttggttcta aaactgatgt ggtttcattt ggagttctct tcttttcatt 60
aaccacatca ccgtccgctt ctcttgcttc tagtagtgat aaactatttt gctctttatg 120
gataaattca ttcattctctt ttgtaaccct ttctgtttgc tgcttttctt cttccatctg 180
tttatcatgt aatagctgct gttctttttc ttttctccaa aaagcttcct gtttttgccg 240
gattcgatgc cgtaattctt catcatcagt gtcagatgac tcagatcctc tgtcactcct 300
ctcatcttca ctgtctcctg atccataacc acccagtcca ccgagtccag tgagggaagc 360
cagtgcactg gactgtgcca gctgttttgc aggagctttg tatcacatca acaacaggaa 420
caacatgtta acacaaatag ccncgattca tagtcatgag tctattggna ttggtaaaac 480
tactactaat gctgnntttt ggggagagaa naaacnntn aaacctacca tcattttaac 540
cagnttaagg ctgctttgaa atataaccct gg 572

```

<210> 8525

<211> 596

<212> DNA

<213> Homo sapiens

<400> 8525

```

gaggggcatg tcatcatttt aatgatgtga tctttgggtgt ttccctcatt agctgtagac   60
tatccctctt cctcccacca caatgtttct atgatgagtt acaaacagaa aggaaatcac  120
attttcatac taaaaacaaa atgatcagag ccttgatttc tccactagaa actacacgta  180
cagttaagag tccacatgca acaccttaaa tcacagactg agacctcaca ttctgacctg  240
gagtctcttc cccttcccca gccttgggct agctttggcc taggctcagg taatactgac  300
accacaggc gctgctctga gggccttgcg gggagaagac tggtaggaaa gccctggggg  360
ctggccagcc tacaccccc actcctgagt gaggacctgc ccactgtccc ttgaccccat  420
cctgtatcag gcaaagcagg cgccccctta cccacaagta agtcccccat tagtaaagtc  480
ccnaagtccc tgtccttcaa gaaatttggg agcctgggcc cgatcctggt gggttcantg  540
gggtaagacg accaaaaaag gttgaanctn tggaaaggct caaagttgga ggnggg      596

```

<210> 8526

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8526

```

aaccactgta aatttattat gcattaggaa gcttaaccta aaaaccaata gcatagtaaa   60
aagatatgtt atctctgttc atagcagaac aggtttcaaa atatattttc ttttaaagtc  120
attcagtcag tacacaatcc tttataaaag ttgtatatat tttttctgt caataccttc  180
attacattta taaatacaag atttacacag caccatca aaaaaaaat taaaaccctt  240
tacaaatata tacatatatt tcatacctat aaaactttca aagggtgtgt ctgttaaagg  300

```

tgggccctag ttaatgggtcc atttactggt gcagcaaaat catataaatc tgtaaagttt 360
 ctttgccata aaacatcttc aaaaaatagc angacactta tcngngaacc tcagcttcat 420
 aaancctaata ttagnaangg acttaatggg cgtantccat gcgatcaaaa aggttaacng 480
 gatggaataa gatgaattgg aaaccaatgc ctctcagag canttaggcc gaatgtgatg 540
 gtgagaaaac tttagaagcn ggactggaaa catggn 576

<210> 8527

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8527

acagattgat ttaaaccattt tttaaaccac atgcttcttt ttctgggctc cagccagatc 60
 tctgggggag gagttgttgg cagtgggtgat ggaattggga aggttctgtg agaaaatctg 120
 aggagcttcc tgcctcccc anatctccct cacaagactg tctctctcag ggttgcttgt 180
 gagaatcatt taggaactgc tgcagngttt tgatgttttc tgaaccctc ccanaaagc 240
 ccaggagctt gtaattgaaa caagaagtna agggaaagac ccagaatcat catttcccca 300
 aagtcattag aggaggccag taaatgtgtt tagggggcac aagttccaa acgccacccc 360
 accattcctt cctaggaagt tctcaaaggt cagcaccaag aacctgtccc tctctttca 420
 tctcctcctc cttctggtct nctcctgggg cttggaaaac cantgcttg aanaggaaa 480
 ggnaaaagga ggacttaaaa tancatgatcc naccgttctg ctttccgggg tgacaangga 540
 ttgcccaacc cttaaagggt tgcccgaagg g 571

<210> 8528

<211> 508

<212> DNA

<213> Homo sapiens

<400> 8528

gagagttgaa acaaagaaac tttaatgttc tggctgacta tactatgttg ataggctgac 60
aattactgca tctatactga aaatacatag actcttttcc ttatcatgag tccctaaaca 120
atacaataga acaactatit gcatagcttt tacaatgcat gaggtatitit aagtaatcta 180
gacataattg agagtataca agaggatgtg ggtaagttac atacaaatat gtcattitit 240
aaaagggact ggacatggct cacggagtgc tggaaccaat acccagcagg tatcaaggga 300
tgactgtctg gaaagaaaact gaaattactt aaggttttac caagtgtta cattcacagg 360
gctatctcca atgggttcgt acaagtatct gaaatgaaat aaaattaata aangctttcc 420
acattccttc cttttgagag aagctntggg gcttttaang ctatccaggg actgggnanaa 480
ccaatntitit nccaattctt catcctac 508

<210> 8529

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8529

gtagacgggc taaggtitit ttacttactt aacattitaaa aataattcat ttgcttcaac 60
aacatggcag acaatcaaga gtactattga aacataattc agagagggtc aggacaggaa 120
agatcacaac ctcattcctg aggtggaatg aaagatctaa gccaggcctc catcctaggc 180
caggctcctc cattaagcag agacaaccaa aagataagaa agccttggcc tcatcccat 240
caggagatag cctgaactgc tcacaaataa gaaacaactt gaccagactg aggactgggt 300
cctgatgagt caataggaaa gtcagttggt tctctcttca gtaggtgact tagcaccctt 360
ctggagaaca tagagtagta gtctggacct ggaggctaag gccacattc aacaaagggt 420
accttctitit cagtaacgct ttggctctit ttccaacagc aagaaacctg aatccangg 480
aagtcattta aaaaaccctt ttingctggac ctggaagcat ttccaagnca actgggggtan 540
aaatnaggcc tccacnttag ggggn 565

<210> 8530

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8530

```

gactgttgatg attttcagca ggtacagttt tgattttatt gcaaggcaca caatcgata 60
tacaatgcat aattatcatc ttttaaagta caagataaaa atcatataca ttatagtaaa 120
gaacatatga gtatattctt gtttcagaga agaaaattgc cttaggaag ctgggttata 180
ccgtttttgg atgtgatttt cgtatttata ctgaatcatc cgaacagctc ttggttagaa 240
aataaatctc attgatagga cacacaacct ttcacagctt tcactttaca atgttccaat 300
ttaaagtcag ccagtgtgct cctgaattt gcatgagtca tcgtatttca tcccaggact 360
agatgaaaca cctataaatt gtctgacaat agttatacac gttaagaac tgnatttctt 420
agtaatatat cacagaatag aaccattttc ttaagatttt atgtgactct ttattgattt 480
tttttctcca agctattttt ncaaagatg gattaatttt gggattancc tanagtttga 540
cttaaactcg aaggggctct ttna 564

```

<210> 8531

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8531

```

aaaaccaaac caaatcattt tattgggcaa tttccttnta ccanaaaatt actaaaanta 60
taaatattaa ctctntaaaa aatactcaga atagatctgn aatcttcctc ctccctcctnc 120
gaactggagc caatcttntt ntttaaacnc tgatggattg catacatgta tgtcttccat 180
atnanccaca tacacaacat tcagatacac ttccctttgt gcagggggat acnccancct 240
cctgccnggt tntggaagct caccattataa tntaccagga caaagctgtg tgctgagtag 300
gaggttatgg nggggttggg gagtaacaag gagataaaag accttggggg cccaacttcc 360
ttatgnggac agagaagata ggtcctttac tcctctntcat taccctgccc tctcatggac 420
tgggctaact gaaggccaan ctcccaaaga agcttggact cactgngtgg gattactgnn 480

```


ggtgtggctg tcagctcagc nccggaaggg caaacittna aangggctgg gaaccagg 538

<210> 8532

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8532

cacactttgg aaaatttcaa ctttattgtt ccaaacatga gaaaatccaa cagttgcaaa 60
 ttatgccagc agttaaatgt gaatectact caagaacatg ttccactggg agttttgatt 120
 aaactctcta ctctgattta actgttctct cttccatttg aaaaatcaga gtacttttta 180
 atcagtcttt gctaaacagc agctattgct attcaatgga gacgggtggcc accatttccc 240
 ctgcatcgtc tctcctacgt aatcagtcct tgatgaactc tcttccata aaaatccctg 300
 tgtcctaaag tcatggcgtg ctctatttca tggtcatttg tagagcacag cagcactgtg 360
 cctgtcagga aaagtgtgtg ctaactgcaa taagcatgat gactgccatc acggttttgt 420
 tattctctgt ccacctccat ggtctctaaa tcagacaatc tttaatctga aaaggcagtg 480
 tccttattcc tccaggaaac tggatagaaa cgctcctcat ctaatggaag cagccctgnc 540
 atcttactgg atcttttcca gaccncaggg gaanggc 577

<210> 8533

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8533

accagtaaaa tagttttatt tgattttaaa atagtcatca atgtgaaaat ttctcaaagc 60
 ttaagagtaa cagtctagag ccaaggttgg gagtgggggc caggcctcac acagagccca 120
 gcttgaggcc cctgagcccc accctccttt ccagagggag ggaggagaca gctgaggggg 180
 ccctgaatca gtcctctccc tcgtcccaa ggccagctgt gccaggcccc tggagggcaa 240

cagctcatgc ggaggactgg ggggggaagc aaacaggtag gaaacggaaa tgaggttaac 300
aattacacca tcacccccaa aaaaaaacia aataacaaaa cttgtgacta tgaaaggatg 360
gaagatgaat actgataaac tcctcagctc ccataaaaag ccagctctgg gctgggttgg 420
gctgattgga ggaaaggctt tgagacccaa ctgcatgtta cctctgaaga attaatatc 480
tangaaaaag ggaaaaccat gaggcaagct tctgaagtca gttacgcan tnacaaggcc 540
ttggcattgg ccacaacctg ccccttcnt 569

<210> 8534

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8534

gattnggatg aaatatitaa tggaaaataa aaacatatc caaactgata aggntaatct 60
ggagaaatgt tttagccata aaacccaaaa ccggaattga gtaaataccg nggttcttag 120
ttaagtaaac acctccatct tatgtaaaca ggtttaaaac aaaaaaata ttattttctg 180
atttggttgt gtaatcgtgg gcctcagagg aaaagcttcc taaccctttt gtcatatata 240
tatatatitit ttggagtctt gctttgtggc catgctggaa tgcagtgggt caatcttggc 300
tactgctac ctccacctnc tgggttcaag caatnntcct gcctcagcct cccaagtanc 360
tgggactaca ggcgtgcacc accatgccca gctaattttt gcattttgta naaatgtgggt 420
ttcaccatgt tggccaggat ggtctttgat ctcttgacct cgttatctgc ccacttcagc 480
ctccaaagtg ctgggaatac naggtgttaa acaccggacc cagnctcctt tggcatntct 540
tganggacce tcaaaaagan atccttgggg ggaac 575

<210> 8535

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8535

```

aaaacttaag agttgtttat ttctgaaatt tticatttag tattttcggg ctgcagttgg 60
ctatgagtaa ctgaaacat gagtaacaga aaccatggat gggggaggat gactggagtc 120
tgaggtatcc taccctacat ggcctgggaa tggtttgttct catgctctgc ctggcagtta 180
attgttcaca agtgtcccca taagtaactg tcgagaagat tctcacagga gaccacgtgg 240
gttgccctgaa gaagccagag tgaaggaggg ttgaaatcaa cgcctttaga gtcttaggaa 300
taaaagttaa aaagccccag agaaatgttg .tcctttgtcc acggcacctg cactaacccc 360
tcccagaaag tgggcatgca gtttcccagg ccagacgagt gttcgttgct caccgaagac 420
cagtgtttac tagcaggatt gtcgccagaa gcagctgcat tctccccgga tgcagacctg 480
cccgttggtg gggactctgc tnacacngaa catggccggg acacctgtgn ccgttggtgac 540
cttcancact ttggacatn tcgctggggg gttgggnaag 580

```

<210> 8536

<211> 590

<212> DNA

<213> Homo sapiens

<400> 8536

```

atttcaaaaa cagggatatc tgcatttaat ttcatcagc aatcaattc cagttaactt 60
accatctctt aaaaatggga gaaagcaaac ataggacgtg aaaagttaa gatgcgtgac 120
atactggaga gtaataagac atactggaga gtagtaagt cacacgtggc aattaagggt 180
tgtaatttag atgtaacaca agaaaaaaag taaaattact gtactttatt gctgtatcta 240
tgctttccca gtatagctat aatactacaa ggagccacag agtgccacct tctggtttta 300
aactgtggca ccttatttct ttgaaatgt cactttataa ggtgtatgta gaaagcaaca 360
gcagcagtta caaatgttg tctgagtgat tctgagagct caaacaagg atccgcgtat 420
aggctgaaga aaaagacgtt cagttaacag tgcgcgtgt agaacttta cacaagtctt 480
cangtggaat tcctgtgtaa acctagtag agatgccact nacgngacc aaaagtnaaa 540
atctttttan ccgntacaag ttaatgaggg ggctggattt tgcaaccacn 590

```

<210> 8537

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8537

```

gagactgagt cttgctctgt ctcccaggct ggagtgcagt ggcacaatct cagctcactg   60
cagcctccgc ctctgggtt caagcgattc tcctgcctca gcctcctgag tagctgagat  120
tacaggcaca cgccaccatg ctacagtaac ttttgtatatt ttagtacaga cagggtttca  180
ccatgttggc caggctggtc ttgaactcct gacctagtga tccacccgcc tcagcctccc  240
aaagtgctgg gattacaggc atgagccaca acgcccaccc tttttttttt taaactttta  300
ttaaatgcta ctttctcata gacttcctta gactggtttg caatctaagg taataggaaa  360
caaggcattg ggcattttga agaaactgca ggtaagcta tggtgccaag cagaagacta  420
aacactgatt tgagtgtcaa atcttcagca cgttctggga tagaggcagg ttctcaaatg  480
gttcctanng gtcttttctc ttactaant aaattttcct tttttgggga atcnangcag  540
atacaaacc ctggatggcc tttttggcna a                                     571

```

<210> 8538

<211> 596

<212> DNA

<213> Homo sapiens

<400> 8538

```

ataaaccaag aaagtaaatt tatttaaatt actaaaatag cttttaagt catttacaga   60
tcagctgcta taattatttt tcctgaaaga cataggtaac atattacttt taaattactt  120
gggtcaatga aacatttaatt aaaaacattt gtttctctat ataatacgta tgtataaaat  180
aagccttttc aaaaactctg gttttcataa tcctctataa atcagatgat ctgacttcta  240
agaggaacaa attacagtaa ggggtataca tttatgaata ctggtagtac tagaggaaag  300
acgttaaacc actctactac cacttgtgga actctcaaag ggtaaatgac aaagccaatg  360

```

actgactcta aaaacaatat ttacatttaa tggttttagt acaataaaaa aacaaggtgg 420
 atagatctag aattgnaaca ttttaagaaa accatagcat ttgacagatg agaaagctca 480
 attatagatg ccaaggtttt actaaactac tatnngtagg taaaggaaat ccatttnaca 540
 ccctttatat aaaatcncta tcttggcttg nggcncctcct taaaagntta ccngct 596

<210> 8539

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8539

ctagtttggg ttagattata atcatctgaa gcacaggata accgagaagc aaaattccat 60
 tctggtacaa acaccaatt tctagaaaag agaaaggaaa agaagaaata cgacgtgagc 120
 ttttttgatc agaagactcc atgaaatgag agcgggtgga atatgaatcc acgtgatttt 180
 tcaagtcttc ctgttgtaga gtcattcaaaa tgaccagggtt tgtgctgcaa aggagccagc 240
 accatgtggc tactgctttg attgtttctca gatgaatgtt tatacaaaat aatatcttat 300
 cttcatttag ttataaaca tacacagtgc tgtccctttc aaattaagga aaaaaaacca 360
 cacacacaaa tactgcaaag tagcaaaata caaaggaaaa caaagctact ttnggttttt 420
 ggcaacatta aaaaagaaag aaatntaaaa agcaatgtgg cattgggtccc tattcattaa 480
 aaaaaaaaaag ggacttnggg cncnacanaa tcagaattag gttngntttc taaaaattca 540
 aag 543

<210> 8540

<211> 593

<212> DNA

<213> Homo sapiens

<400> 8540

atttaaaact ttatttaacg ctggaagaaa aataatgcaa tgtgacaatg tacaggctcct 60

gttgccctaaa tccgtagtag aaacagatat taccacttag caagctcacg tgggtgccaat 120
 tctgagatca gacggggttg ttcctcctta ggaagtggcc actggaagca ttgtttttcc 180
 atgctatttc cgtgaagcct tttgcttggt tcgagtttaa atttctccct ttgtgtgagt 240
 atgactatag ttctggcctg gtgttttcta tttatttagt tttagatgtc agcattttac 300
 tatacttggt cctctcactt cagaataaca gggctattta ttgatacaaa ggagagggtg 360
 tcagatcatc ttgttaagat gcagagctca aaataaacac taaatcttta tttggagatc 420
 cacatccttc ctcaaaggaa ggctcatgag taaatttgta tgcagtatna agcccaagta 480
 gaggggtgat tttaatgact actttgctta catttttagat tnggccaaat gtctcaatca 540
 atgcttgcan gaatgggtggc ccttcccang tttaacccaa anacctgagg caa 593

<210> 8541

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8541

atttgcttat tattgcattt tatagaacct ggcaaagata ttacaagaat gtaaaaatac 60
 aggccaattt ctttcattaa catagatgag aacaaaatct aaacaatacg ttatcaaaaat 120
 aaatccagta ttgcatacaa caaataataa tgggtgtattt cagcaagttg tggttaacaaa 180
 ttgaagtaaa tcaatgtact aagccacatt aacagaacaa aaatgatata caattgtctc 240
 aataatttac agaaaagaca taggtagaat acgagttttc attttataca aaaacttgta 300
 gtaaattaac agatcagaac ttcctaaatt tgatccccctg catcaatcaa aaaaaacctg 360
 catcaaatat tatgtttaat ggcaaaatac tgaaagcgcc ccctatccac ctcaagacct 420
 gtcacagtc aaagatgctt actctacca ctgggtgcat cctagtctga gtaactggtt 480
 aaaacgaaag aactgtcttg ggcgcggcgg gtcacatntg naatccagcc tttgggaaaa 540
 cnaggccggt ggaccttgcg gcaagaattc naganengcn ggc 583

<210> 8542

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8542

```
cgtaaacaaa atttaataca accatatagt caagtaataa tggttaaaag acattttatt 60
agatacaact tttaaaaaat taaactatgc aagaagtata tttaaacaaa acatgtaagt 120
aagtattcac gtgctacaac ttaactaaga acaattaaat acaaagcatt ctttccacta 180
tgaagactct ggagcctcta attgaaagca aatgacctta ggtctatact agttgtaaag 240
cagattatac ttttgttcaa ctctaaatth gtattgtctt agagctccaa caactctcaa 300
taaaaattta aataaagaaa ccttggggga ggggtgatag gggaagggga gagtaagtgc 360
tttttcaaaa aggtaaatga aaaagcctga agagggaata aattgncata agtatggaac 420
aaaaataagt atactttttt gacattcgat gtagatactg naaatgaatt tcccnggttt 480
aatcaatgta ggatagatnt ttggctgaat ntttaaaaag cncctaggnt caaaant 537
```

<210> 8543

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8543

```
ccttgccaaa ctttattgtg attaaaattc cagagacagt accagctcca catacctcta 60
gccctgtctt tgccctagtt cccgagtgtc cttcaccccc atcttccaaa tcattctctg 120
tttcacgggg aagaaaaaac ctagggtctg tgtgaatgtg ccctctcagg tccctgagtt 180
ggccccaggt agagctgtaa gagatcagga agagggcctc cctgcctgac ggcgatgac 240
ctggaggcaa cgtgtggagc agaaagagaa gtcgaggtag tgaaaggagag tcaggccttg 300
gagggatgcc ccacaactcc agcagcgtcg agtattgacg attgcagagt cagggtattg 360
agaggtaggg gctcccaact gggcagcgag tcggcgctct gcagccagag ctctcttctc 420
tcggtcactg agggcggaac atcgccgctg ctcttctngt tcacgttct nctgnttctg 480
ntgcctctgn tgntggctct tcccgttgcc gccggctgct ttggttcctt ttccgnaa 539
```

<210> 8544

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8544

```
caccagcagc gtcctccctt tattttagtt tattaataga atacagagng caggcactta 60
cagnggtcaa actgagcgag gagtgggtga ggtctcctca nagagaggcc gccctgggcc 120
caccatcag ggaggcatgg gcgggagctg anaggcccc aagaccccc gccaccacca 180
cccacatagc ccaagcccag ccaccctggg ggaccagga ggaggaggag gagaggaata 240
gggcaaggcc ggcccgggcc aacggntccg ggcctagcaa aggcacctnt ggcagccgag 300
gctgggccag gctcaggctg tgtggttaat atggccggga aggactatgt acaccttagg 360
cctgcantg ggcactaccg agcccactgg gccaggcttg ccgctgggga actcctgcta 420
atgggaagtt gatatacccc tggacccac aagggtggg gatgtangcc cnttgtgcc 480
cgacttttta naaggcttgc ctaatgggct ttncaccca anaaacttgg tagaatcccc 540
ccaggntgga ccn 554
```

<210> 8545

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8545

```
aacaatgaga catatgcagc tttatttaaat aatccgtaaa aagtcatact ctggcagagt 60
gatgcattcc ttatctcagc agaaagcaaa cagtctgtct gaaaagcccc ttccaagat 120
ttggaactgt gtaaccctga gcttacatct caatgctccc aagagctggg ctcttgctat 180
gtggtagttg gtctccacaa ttctctcacc ctccagcaat actctctgtc tggctgtgac 240
tccctcacct aacagtagac atgaggctga aaacaacttt acctggacag ggctaccct 300
```


acagattggc cctttctctc ctacaaaagg gagttcatag gattaacaat ctttctaattg 360
gctgggagca atgactcatg cctgtaatcc cagcactttg ggaggctgag gcagggtggat 420
cacctgaggt cangagtttg agaccagcct ggccaacatg gtgaaacttc atcctactaa 480
aaatacctaa ctttaactggg tatggtggca agtgcctgna anctcagttc tcggaggcta 540
agccgganaa tnnttgaacc cagggggn 568

<210> 8546

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8546

acatacatat tcttatattg tgtaataaaa gattctgaag tccattactg gctagaataa 60
taactagaaa ttgcttaata ttactataca ttgcatttga acttaatctc cacagtaaca 120
attaggtagt attacttgga tttcatggat gaagaaaacc aagatacaaa aagttcacac 180
agccagtaag cagatgagcc tgacttcata gtcatacata gcctgaattg agtcccagca 240
ggagcacatg ggcatggaca tctaccagat ttgggaactg gcgtagccaa gcaagaaata 300
ggagacggaa tcaggagtta ggattccatg cttaggacca tcccagatgg atggctgcct 360
ccctctggga gctgcactct tctgaggttg caggcatcca gggccagggt gcttctgtga 420
ggtgtgccag cacgtgccac tctgcttgga tcaagctatc atggtctgan ggctgcttnc 480
ctcancataa gaaggggctt ctattgggaa gngtaggctt cantgnaggg nccacttgag 540
cctttttttt agagacag 558

<210> 8547

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8547

agaagtactg atttttattg ttatacaaca catatatata attgtttccc caaaatatgc 60
acaattacat gtgtcaattt taaaaaatga atgaagacta taatgtaaaa cctatagctg 120
taaaattcct agcacaatac agaagggtga agcttcatta caactggtcg tggcaataat 180
ttgggggacg tagcatcaac ggatgagaca acaaaagcaa gggaatacac aaggtactga 240
atcagtgtat gaaaaatata ccaaacagac aaagcagaac atggaataga tatatgcaca 300
ttgtagtatt actcacaac atgttacctg gaagcaaagtg tacccttaag gatgagtaga 360
ttcagcaaac agggcacgta caatcactgg gatagcattc agccttaaaa ataaggaaat 420
cttgaaaagt ctaccataag gacaaatctt caaaacattc tggttaagtaa aataagacag 480
tccaaaangg aagctgntta ataccctcat gtaaaaatta gtcaactcaa ggaanccagn 540
gtcgtantnt na 552

<210> 8548

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8548

ccttttagaca ttacaggta tttatttgag taagagctca taaaatatat ttttataata 60
tgcacaagaa aaaatacatt tgaatgaata aaaaataaaa tgacaggagg tgacagaatt 120
tagtgtttat aaatgaggtc ataaagaact ttaataattc agagaagaag ttcaaagtgt 180
atttaaaagt tgagaccctg ctttacaata ttttataatt ttaaaaaaag gcgttttaag 240
gtgatagggtg acttaataat ttccacttt caaatgggt ttctagacac tgttgttcat 300
gaaccaaaaa caaacaaca aacaaacaac aacaaaaccc aaacactttg gcaagcaaag 360
tattattagt catagcagct tcataacagt ttactttttt aatataaaga tttttcaatt 420
cacacttgta gggagtagaa aaactaatat gctaagtctg taagctacgc agccaaaaat 480
aatgacctaa tgaagcccga atctgngaaa aggtgcacca cactgcttat atagtanctg 540
agtaaagtga ancctgggct tattaacttt n 571

<210> 8549

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8549

```

aaaccacata ctttatttga tgtcaacatc aaagaaggaa tattttaaaa agcacataga   60
aacccttaag ttagtaatat tttaaactgc atgaaaaaca tattatttta catcttgtca  120
tactgtatat acaactgtac ataaacttct gcatttcaaa gcacttgtca ttataaaagt  180
gaaaagtttg aaagtgctaa ataaacattt cctaattatt attttaaaa acagcactct  240
tttggaagtt atctcttctt tgtgcttata gttgatctgc aaacatttca agtcaaagtt  300
tctggaaact tctttaggaa acatctggag aaaatcatag tagacaaggg ctaagtgcag  360
acataagcag ctccatttta taaacaaaat ttcgaccttc cattttattc cactgaactt  420
ctttgaatgg cccacgaaga tgactccatt tggatcttg naaaacatca ctttttggga  480
aggctttaca tttgntccg aggnaactgg accntaatct tgntggcnct tttanggcc   539
    
```

<210> 8550

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8550

```

aacaggtaaa atgaataaca tactttattt aatccaatag agccaacata ttatcattgc   60
aatacacaaa ggaaaagtta ttagtgagat attttacatt atttttgaa gtaggtattt  120
gaaatctggt atatatttta tacattgagc acatctcaat tcagactagg catgtatgaa  180
gtactcaaca gacattgggtg gctcctggat accatattggg acagccagtg ccattctcat  240
ccttgatatt tgtttctacc ctccatgta cctcttaatt tcttttatag ctggttcaaa  300
aaacatattg cacctctcta ccaaagtcac agcagctcac tcaacagctg ttgttccctg  360
cgcataaaga gagtgtggaa aagctggaag aaatcatcct cttcctttaa gtgctttata  420
ttggatcatat tttctctttg ggggnntctt tctattctga gagaaaatat gtantgggat  480
    
```

ggttttctct tcccactact cttttggttt tactgcaatt aattggaagg acgaattttt 540
tttatgggtca attgntctct taaaggngnn 570

<210> 8551

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8551

caacaaacac tttatatcat ttattaatgc agtatacatt agatctaaaa tctgcagttt 60
ctaagcacac catgtttaga tctttcagat ctttctgcag ttttaggtta tttctacaga 120
ggtaccttta agtgaatgaa taccacattc tgtaattcct gaaaatatag tacagagtga 180
aatgatttaa atataattta ggcacatatt gattatgaaa atagattatc tctcaataca 240
atacttctct gtcttggtaa aaataataaa gcaaagaaaa tagttcattt ctgaagttgc 300
tttcttcac ttgtaaaggt ctgatctcct cccactatgc atatgtaccc tttactgtta 360
aggaaagctt tgcatatgta gatatagaag aataagctac gtaaatacta aagatatgnc 420
attctcccaa aggagacaca ggtgggtttc aatgattcct tggcttatgg tgatgagtct 480
gnanaantca gaanccantt ggcccngctt atatcccggg tttgggggan aaaata 536

<210> 8552

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8552

gaccgtagga catattaaga tgtttattat ttactaagag taacatgtat acatttgcag 60
taatttgtac aatccaacta cattacaatt cacagtaaca tacactagct ctaacctgcc 120
ttggatacaa ttaagtctcc tcaacacact attttatcgc caaacttaca ttctggcttt 180
tataatcatt ttgcaacacc tgggtacagta tacacctata gctttgccat agaaatgccc 240

ctaaatgccc ttcagagagc agaggtgaat actttctcat gaagaaacgc caacttttct 300
aagcgagttc gtttcagtag tgggagccat tcccagtagg ataactctac cacacggtag 360
ccaagccgag ccagctgccg cctcttcata ttgtgcagtc caaggagatc cctggagcca 420
tagcaatact ggttcctggt tgtgaactga acagccagct tcattcttgg ggtctgcatg 480
cangctgcgg ggcacaagcc aagccatctt caatggccct gattatctgn tacattggaa 540
aaggaagccc ccanangtac agtggcttat ttcaact 577

<210> 8553

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8553

gtcaaaaagg atcaaacact ttattcatct acacataaca tatataaaag caagcaaaat 60
caggatgttt tcctcagcca cctttccac attttgtgca gttttagtga actataaatc 120
actgacttct tcaggcctaa aagagaaaag atgagaaagt aagaagatgg aggcttgttg 180
agtggatgct cagagtttca gtgacattct gagcagactt gtctttggag gagggcagtg 240
aggggctgac ccgtggctct aggagaccag ggagctgaag gtgattaaag gtcactgtga 300
tcaatgtagg gggaaatgat tctgatttcg gcattttccg atttagggct atggatgcca 360
acggttccta agttattggg ataagtgatc cttttgagtt atgaacatat tggcagcctc 420
tgaatttagc tctttcaaaa ggggtaggac aaggataaga ctctgtatgc cactgggtcc 480
ccgtctnttn agcctnaant tcaacccac ttactggctc tatggcctgn gnaangc 537

<210> 8554

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8554

attgtgaaca caatthttctt tathttcattt ttggagttht ctgaacagaa aaatacaatt 60
gathtttctgt atattgatct agcctgtgac ctigtctgaac ttgattaatt ctattacact 120
atgathttttt gttgtggtta gacccttaca caatcaaatg aggttaaaaa aaattgtcag 180
agtggcccca gaccaacaac aggatgacag tagcctttgc ccatacagag ataaaattta 240
gtttttgcag tcctttccca tagagattgt atggcagtag ccaattctat ggcctactgc 300
catacaacct gaactgaagt ccagaaagtt taggtgactg ggccacagag ctaattactg 360
gtggagccaa gaagagaaat tatatcccta cctccttgcc cactaagctc cccattccag 420
tggtgtgtgt tttgtgtcct tttccatgat tgggttttag tagctgncat ttccttcagt 480
gtncagaag tathtttcttg gcctttcagt aaagcttccc aaagtttgct gngttccgcc 540
ttaacttgta anttggcctc cntgntaaac atthtttgaaa acg 583

<210> 8555

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8555

ctaagagatg aggtctcact acattgcccc ggggtggtctc taactcctag cctcaagtga 60
tcctcctgcc ttggcctccc aaagcgctag gattacaggc ataagccacc acacctggcc 120
cccatattcg agcctaattgt tcctttggga aacaactgag taaagaggat gccaaccccc 180
aaaagaaact gaagataacg ttctgcccag tgggaccgat gatcatgcta taacactcct 240
tttgtctcca ggaaaagctg aaagcagctc tagctaacca acccccctct aaacccttg 300
acatacatac ggcttccaac tccagcaagg gggccaacca acccactcaa atcaaaacca 360
aaaactaaat cataacagta aaaatatgac cagcaaacaa cgaaagagga tatctctggt 420
cccacagttt cctacgggag accagatggc tgatttctgg cattctctgn cctggagccn 480
gaaaattacn ccaatntccc ttggacntaa ggtanacctt gnggaccaaa gccaa 535

<210> 8556

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8556

```

atgtttaaat gttgtttcct taatatcatc aaatatccag ccagagttca aatttgcttt 60
gtcccttaag cacattttta caagattgat tggctagttc agatcaagag gcaaacaagg 120
ttcatacatt gcactggatt cacacgtctc aagtatcttt caatctccag gcttcccttc 180
ccttcccttt tcctcttgta atgtatttgt tgaagaatct aggtccctct gtagtcactc 240
ctctcccat tcccagcccc tggttaaccac ttacctgttt tctgacccta taattttgta 300
gggcccactt tgtactgatg tacttctgac taggtgtgtt tatgttcaag catcagagcc 360
aaggcccaaa cctctaccct ggccctcctt ctgctgtggc ccaactgtac ccagagctgg 420
gctctcccg tctccctgcct gttaatccta gaagtgggtg ccgaggaggg agaaacagga 480
agganggagt tgggganggc aacttggtac atggacaaca aggctgttcc acttcancaa 540
caagctttgg ggtaacttng ntccaaattg a 571

```

<210> 8557

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8557

```

gaataaactg catgtttatt ccaggctcgt ttagctggac gagcagtaca gacagggtctg 60
aggctgactc catggccatg tgggcagagg tcaaaccat gatctctctt cctacagctt 120
cctaattgtc gcgatgttgg tcttttgaag gagggcccca cagagccgag cttgcttggt 180
tatctgggac tgctgctcag tctgagtagg ggagggtaat gaaccagtca ggcctcctcc 240
tgagggtgcc caacactggc ctagtcccca aggctgacga aacatggtct ggcctgaccc 300
caggacgtgg ggtgaggagg aacactgggc ataatatagt agcggaaca ggcaagcctc 360
tatgggtccc tcccccttag aattttaggg tagggaacga ggaggctaca gactaaattg 420
cagaactatc tgcacctggg ccttgagctt ttncctnact nccagtggag ccattctnng 480

```

gactgagttc atgangacta ccanaaggtg gcaagttcaa tctggncctg gctt 534

<210> 8558

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8558

gacggtcttg cttgaggttt atcaattaat tgatcttttc taataaccag ctctttgntt 60
tattctttaa agtgtttatac tgttttcaat ttcattgagt tctactcttt gttattgcat 120
ctttctgctg gcattgggtc tatttttccct tcttttttta ggtttttgag gtggaagctt 180
aggttactgg ttgaagactt ttcttttcta gagcatgcat ttagtgctat atattttccc 240
atcagttctg ctttatgtgt ctcacaaatt ttatgttggt ttcattttca ttcagttcag 300
tgcattttta aaattttcttt tgagatttcc tctatgacca tgggttataa aatattgttg 360
ttcagttttc aagtgttttg tgattttccc attatcattg gtatttattt ctagttcggn 420
tcttttgngg ttggagaaag tacttgtagt atttcagttc ttttaaattg gttgangctt 480
ggtttaatgc ccanggncta tccttaaattg ggggggtccgn gagcccctgg anaaactggg 540
ntcngccggt 550

<210> 8559

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8559

cacgtagtaa cttatagata tatttggaac actgattatc ttttaaaaaa tgactactaa 60
acagattaaa atgcagagtt cattaaaata cagaggatgc ctctggttct ctggtattga 120
ctctttttgt ctactaagat aagaagtctg ggctaggctg aaaaactcag aatccaggtc 180
tggggtttcc cagtactatg ctcccatctc ccagtactgt gctcccatct cccagtacta 240

tgctcccatt tccgagtact gngaactccc ctttcccagt actgtgggct cccatttccc 300
 agtactgtgc tcccatttcc cagtactgtg ctcccatttc tcagtactgt atgcccattt 360
 cccagtactg tatgcccatt tcccagtact gngctcccat ttctcagtag tgtactccca 420
 tttntcagac tgggctccca cttttnagta ctgggctcca cttccaagac tgggctccat 480
 ttccaataact gggctccatt ttgcaagctt gganccccat ttccaagacc ngggttccca 540
 tttcccagac tgggc 555

<210> 8560

<211> 419

<212> DNA

<213> Homo sapiens

<400> 8560

gcagggagtg caacatttat ttcataacag aaccctttt ccacagagca gctgacaggg 60
 ggctgcatga aacatacttt ggaaattaaa gtgaactctc cacttgggca taatgttatg 120
 tggncacatg gattggctta aaagggaac aagaatactt naacatttga tcaacagtag 180
 gcagttgctg gacatttttag aaaaaggaga aatccatttt ttgaccatgg ctaaacaatgg 240
 ggaaacagca tcacattttc ctgaaccacc ctaatcccgg cccctcaaga tccaccaggt 300
 ntgcaacccc aaaccccagt cacatacatt aaatctacac ttttattttt tagntgtaaa 360
 atgtgctttt tcctcaatga actttaatca gtccaggacc taaaacnca cncncannn 419

<210> 8561

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8561

aaaaaatgca atttttattt gttgaacata atttgaaact gtaaaaagat ttctctgtcc 60
 atcaccagaa atccagaaga cacctgaaga ggactgactg tttctttgcc acggggaagg 120

tgtgatgaaa caattaaaat cccatgcatc cctggccctt cctccacgtt gcccctcaga 180
 atgcctgcag ctgcagcagg caggaggcag caggagaacc cgggctgtgg aaggcccctc 240
 tgcctctctg ggaaagctgc tggggaagcc agaggtcaca gtgcattgga ggcctggctt 300
 tcagccactg gccaggccaa aatgaaacat ctgctcaagt ctccccaggc accttgctgg 360
 gggtagtggt gagaaagaag tggagaaaac tgatgctgga ccacaagtta tcaccctgta 420
 ccttggcttt gaagtggccc ctgctggtac aggaacaggg tgagagtnaa agttaattaa 480
 ttaaagccac atgctttaan gnnaaaaggn nccn 514

<210> 8562

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8562

gngttgctga ccttcacttt tatttaaata tagtgatctt ttaagagaat aaacaaaaaa 60
 tactttacac agcaaatatt ttacataaat gtaaaccatgc atgtctactt cataattaag 120
 caaaaaaact tttaggcaca agattttaaa aataaagaat gagacaatga aaccaagact 180
 ggaataacag aagtaacaaa aactcacatt tcctaactct tcaattgggc ttgncttcca 240
 acctattggt taaggcctga gtttcagaaa tcctaccttc cttgccaaat agaaacatcc 300
 actttggctg natataacat tatccacata acacactaat tctctttcaa aataatgnaa 360
 taaatatacc attcatacac acacacacac acacacacac acacaccctg ctgaaccagc 420
 ctntcaaata ggaaaataag gatitttgga ttttcaaggt ttcctnccac ccaagcacat 480
 tcccnncnt ttacccttnc nttggaaaaa tggg 514

<210> 8563

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8563

```
cattggaaac ttaactgatt ctttattcca actatcaatt ttataacttg agcccaatta 60
acattcaaag ggtcatgatt acctcttctc ctaagtggc aactccatag ttgtatagtt 120
ccccacata atgccttcta acaacatctt cactaacttg aagtgatgg gctaaatcca 180
cagctagagc tggccaatct tggctttcc caaaaggagt ggggtgtggc tcttctgtgg 240
gatctttgac ctttgtggct gaatgttggg cctggacagc tgcactgaca actttcaata 300
agaactgttg tcgtacagaa ataaaatttg gatccatttc cccactaggt aataactgaa 360
ttgaagttag gtctttgaaa aatgcatttt ttcccttact gtcaaaaagt gaaagtggct 420
tcacggnctt cagagaaaac ctcactgactg catacaagat ggagcacagg atggantgg 480
gcttcaccag tgggtagtgg gatgtgcttt tggttaaggg ccanttcct ntggaaattg 540
gncctttcac ggaaagn 557
```

<210> 8564

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8564

```
caccataang gcnccactaa anggttttat ttanaacctc agcagcctgt anaggctaca 60
caatttcagg ttcactcagct tttaacta ttttcaacgt aagaatanaa gctattanca 120
aataacttct atcaaatnta aaaggaggc ctaggatntn caacatcttt gctttataaa 180
gatgcnccta acatgaacta acttgtcaac ttanactnt tacagcagct caaacagttg 240
caaaanfaat gaacatcagn gatttctggc aataagtctg tcagtntaa nagagtaaac 300
aacacttttt taaagctaca ttctagtctt tcttcataca ctacacataa gaaagaaatg 360
caggttcaaa aataaatcac caaaagctt ttccatgtcc ctgagactta accttcagtt 420
caacccaanc angagataag ngtnctcaa aaggccttct gaatctcaag aatctggttt 480
ccaacttгна cttttntaa ggatagncaa taaggttcct taaaaa 526
```

<210> 8565

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8565

```

at tt t t g a a a a   g t a t t t a c t t   a g t t t a a a t a   a a t t a a t t g c   a a a t a a a a t   t a a g c t a c a a   60
t a t a t a g c c t   g a a t a a a a a t   g a c t a g a a c a   a a t a c a a c a c   a g g a c t t g c t   t t c t t g c a t t   120
a g t c a c a a a g   c a t g t g a c a a   t c t a g a a a a c   t t c a a a a t c a   a t t a c a t t t c   t t t g a a a a a g   180
g g g t a a c a g c   a g t t a c t g a t   a c a t c a c a a c   t a a t a a a c t t   a t a a t a c a a g   t t t c c t g a c a   240
t g c a t t t c c t   g a g t g a a c c c   a a a t g a t c a t   t t t t t a a a a c   a a g g a a g t t t   c g a c a g t t g a   300
a g t a a a a t a a   a a t a a t t c a t   g g c t t c t a a g   c a a c a a g t t t   t g n t t t t t a a   a a a c c a a a a g   360
a a a a t t c a g a   a c a g t t t t g t   a a t a g g a t a a   a t t a a a g g n a   t g c t c c a c a t   a t a a a a c t t t   420
g c t a c a g c a g   t t a a g t a t t a   t a c a c t t t t c   a a a c t a a a g g   g a a a c a a t c a   a a a t t t t a a a   480
g g a a g a t c c g   g c t a a c t a a a   a n g n c c n g g t   t c t a c a g g g g   c a a a a a a a g a   a t t g g t g g a a   540
g g c n                                                    544

```

<210> 8566

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8566

```

a c a g a a g t a a   a g t t t a t t a c   a t t t g a a a c a   a t a c a g c a g a   a a c c t c a a a a   g t t t a c t c a t   60
a a a t a t a g t t   t a a t t c t t a c   a a a t c t t c t t   t t g a a a a t g c   a a t t c a t a t a   t g c t g c a a c c   120
t c a g a a g t t t   g a a t t t g a a a   t g a a a t a t g a   a g g t a g t a g t   c a g g g a a g t c   a c a t c a g a g t   180
g c c t t g t c a a   a t a t c c a a a c   a a a t c a g c a c   a t a c c t c t t c   c t t g a t a c a g   g a g g a a a a a a   240
g t g a t t c t a a   a t a t a t c c a a   g t g a a t g c a g   a a a a a t a c a t   t a c t a t t t g a   g g c a g a c c a t   300
g c t a a a a t a t   a a t t t a c a a t   g a t t a g t t t g   c a c t t a a g a t   g g t t a a t a a c   g c a t t t a a a c   360
c a a t g a a a t g   a a g g t t a a g t   t g a a t t t t g t   a g t a t t t g c t   c a g t c t c t g t   c t a a a c a a t a   420

```

gttcatctga aaagtttgga aaaagccaat acctgatctt ctctttatgc ttatcatttc 480
tactggcatc ttaaattgcaa accaaatcaa tccgcatcag aatttttacc ttttaaaatg 540
gaaactaatg gcn 553

<210> 8567

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8567

agctgcaaca gcactttatt gggatctgag tctacagttc acatagggag gtgaagccgt 60
gggagaagca ggggtaaaaa aaaaaaaagg ggggggactt cacccttag ggacagctgc 120
ttccaaacct aacaaaaccc cagggttaagt cctcgtgctg ggcctcgagc cagcaaccct 180
agtcaaatcc caaggcaccg gtcagcatgt ggggtcaagg gcccactatg gggacataca 240
ctcaagagga tgaaagctct ttagcttcag aatcagattg ccttccccag accccacccc 300
aaaacaggt cctctcccat ctcccccttc acagtgacaa aacacaagcc cacatcccag 360
ggcctggagt atttgcatgc atttgcatag acggcaacac aggtccagct aaggcctttt 420
tctacataaa gtgacatcag tgcanggctg gggaatttgc tctactgggt gaaagatatc 480
tgaggggccc caaccagnen ggccgagncc ccttcaggna gttantacc ttggaacttg 540
ggctggccag c 551

<210> 8568

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8568

gngattcttt ttttcattga aaatgtcaat ttanaaaacn caaaagattt cacactttat 60
tcagacaaca ctgagagaag aaaagggaag agtgagtagg ggagatgggg agatccggct 120

cccaaggatt tcaggaaaca cagnnggggca cctgatctag cacacattca gagggtaggg 180
 aggggaaggg atctagctat actctgggca tggagcaggg aaggtcgtcc ttgctatgga 240
 ggaaaggaga gaggaaggac agaggaagag tgggtcccca tctcatctcg acaatntcac 300
 aagacaggag tatatcggga cctagctacc agggagggat ggatgcaaga agggattcca 360
 ggatctaaca gaccttgac actctggatc tactctcaag aaacaacctt ccccagagaa 420
 tcaggatctg ggggaaatgg ngggngtcag ccaatctnct ttagagaccc ccaaagcaac 480
 ccnnggtttg gggttcctgc cccttcccca aaatgnggga aatgaaaaag tttggccatg 540
 gggaat 546

<210> 8569

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8569

ctatggagtc atgtttaatg tagggaaata acattttgtc aatactaggc accataaaat 60
 gtaaacacaa ttactgtcat aaacctagat ataccttcaa ggattgaaga ttgaaagtgg 120
 ctttgtttta gttagttacc ctgtttgcat atagtgcaga aaaaggtctt catgttagca 180
 ctatgtacat taagaagaga tccaaattac aagagaggca gataaaattt gaattcttta 240
 agcattcatt aaacgaagtt ttggagtaac atccacgttt atcttccttt cactaatcac 300
 gttccctgtt aagcacatca taacaacagc acagtgaagt gaatgatgaa ataagagcat 360
 tttgatacac tagaaaacag tgctcagtga gacatttaca ttctatttat atgattaaac 420
 atttgatcat acagtacctt cctacaggat tactggctaa ttttggggtg ggggttatac 480
 tattagangn attacttacc tggaaacttn ctccntaat tgcaaccttt ggggccttta 540
 ttttatgg 548

<210> 8570

<211> 261

<212> DNA

<213> Homo sapiens

<400> 8570

```
cacatgaagn ctncatttat tctgggatgg gttagagtaa gcctttgagg ctgccatcag 60
gctggctgag ttgntgcca acattgtatc cagcagtcctc aggcccgcac agtgcacanc 120
cagcatgggg ctnacaggtg cagatggaat ccataagctc ccancntgc tgcaaaggcc 180
aggcctaggg gtccgggtac atgcantgag tccttggggc anggccagcc ctgctgacta 240
cacaancang gttggtggng a 261
```

<210> 8571

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8571

```
ataggtacac gtctatttac tgcacaaata tcaaagtgtg acatcgatgg taaaaagttg 60
taaactggct aacagtcate agcacttaag tacaatgggt ctatactgac acttccattc 120
tcattttaag agcttatata tttaattgat gactgctctc ctcatcaggg acatttaaga 180
tatggaaaag gcatttatat acacacgcat gcatgcacat atgcttaacc ttacaaactg 240
aaaaagtaag cccaagcatg attaattaat tactttgcct ggatcaataa atactagtct 300
caaatgttaa gtgtactaat aaggacagaa gctatcagtt acataaatta tcatgttgct 360
acctactgat gctccatttg ctaatgcatg ttagtcagtc tgtagacttt atccaacaca 420
tacatagaga ttatTTTTTT ggttgnttga aattctcagc agatcaacag atctcttttg 480
gacatttctc ttccattact nttangatga aaatggaata cctnttaa ataaaatttt 540
aaatnccngc c 551
```

<210> 8572

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8572

```
ccattgaaag aatatattt ttgcagctgt taaaagacat ttttcctaa aaaaagaaaa 60
gctgtgcttt acatagcaat cttataaaag aaatgctaga atcagaaaac catcatttta 120
ggctgggtgc agtggctcac acctgtaacc ccagcacttt gggaggacga ggcagggtgga 180
tcacttgagg tcaggagtgc aagaccagtc tggccagctc gatgaaactc cgtctctact 240
aaaaatataa aaattagcag agcacagtgg cacctgcctg taatcccagc tactcaggag 300
ggtgaagcat gagaactgct tgaacctggg aggcggagggt tgcagtgagc cgagattgtg 360
ccactgccct ccagcttgga caatagagca ggatttcgtc tcaaaaaaaaa agagaaaang 420
aaaaccatta ttttgcaata gccaatgtta taatctacac aggcacagac tatcaatgct 480
taaaatcatt ttaaaaggac atcttaaggg gtaattnccc gaaatttgga tttttgaacc 540
cttntgtaat naaaattcn 559
```

<210> 8573

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8573

```
ggaaatcaag ttttggtttt atatgaacag aagtagacca tctagaaata tttcagttta 60
tttaaattgt taagtagaat atgaaaccga attttagct agtaccagag aatggactta 120
actgtttggt gtttaatgag aacagcttct acacaggatc ccaagagact tacagaaaag 180
gggcaaagcc ctaatatata gcaaataaaa ctcatgtttc aaacagatta tacaaaaatt 240
gatttatact tcatttcctt tttttgatat ttagaaagtg cagatttaac aaaaggtagc 300
catatccttt ctatgtacaa tgccgattat aattatgcaa aactgtcagt ctgttatcca 360
aaaatcccag tgtttagctc tccaacctta agtcatggaa ttgaataaga attaaagagg 420
gttaaaataa aaaagctaata gccacattcc agataaaggg aagcaccaat acattaatct 480
aacaccagta ggttaaccct aacntttcaa aagcttaaca tcattcatta tatttttagt 540
```


ggaaaatagg gatnttc

557

<210> 8574

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8574

ctttttgaca gagttttgct cttgttgccc aggccggagt gcaattgcta tggcgtgac	60
ttggctcacc gcaacctccg cctcctgggt tcaagcaatt ctctgcctc cgagtagctg	120
ggattacagg catgtgccac cacgcccagc taatTTTTTg tatttttagt agagacggga	180
tttctccatg ttggtcaggc tagtctcaaa ctctgactt caggatgcc acccacctcg	240
gcctcccaaa gtgctgggat tacaggcgtg agccactgcg cctggcccgg ttttactttt	300
aacaagcgtg agagcatctg ttgctgagct atgtgggcaa catgcatgtg aggtgcggcc	360
ctgccctcca ggacacgcag cttcatgagt agagaagaaa tcttatccaa gggcgaagta	420
gcaagaacac agcaaaccac cgcacacaga agggcgatcc acaagtcaaa ctggcanatg	480
gaaacagctg agggctctta ntggctccca anggaaaagg cgggctantc tgagaactga	540
ngcngaaggg acttgctggt t	561

<210> 8575

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8575

gattcaaaca agtataattc tcaagttatc acaaaatttc ccacaaaaat ttacaatcag	60
caaaatagtt tccttatttc tcatgtatca ttttcatata attccatggt ttcactaata	120
ttatatgtta caataagcct ccattagtcc ctcaaaacga tgatataaat aagtctgtac	180
aacctagcat agagtaaaaa actgaaacca agattcccaa cgtttttcat agcagccggg	240

cacactttgg tgacccaac gagaaccctc tcggcagcag ccaggagctg ttcaccttcc 300
 agaagcaggg cctgtggcag cctaacaggg agaggccacg gggcccaaaa acgcaacacg 360
 tctcaaggca aacccgaggg aggaacttgg tctgggagga agagagaact cgctcctcaa 420
 ccaccccaga cactggagtg tcaggaaagc actgagctgt tggggcacac tgnccagccc 480
 ggnccagcaa gctaaccagt cacagnttca ccttcaactt ttcaaggagc aattttantg 540
 gggaanaacc ctt 553

<210> 8576

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8576

gtttgttctc tagttttatt atttgtcaat tttcccaaca caggaactat aactcatttt 60
 gaggatTTTT ttcagtgcac ttcgcagcaa aaatgaacaa gggaatcatt aaaattgttg 120
 tacacaaacc aactcttttt cttataattt acaatttggt gaaaaaatta ttgttttgct 180
 gttttcatcc tactaacctc tttaacagaa cacaatttat cagagcacia agcttaaact 240
 tcttatgatg atgcaacaga cacagccacc tacaatggct gataaacaac aggtatgtta 300
 cacacactga ttggaagacc atatcagaaa aaacagagta aggcaccact cttgggaaat 360
 taaggtagct tgcagtaaca agtggtgagc accataataa gtaggtgctc aataaataca 420
 tgaatgaatg atgaaagcca taattagctc tattctttta attgccagca attcttcaac 480
 ctcaacaaaa atacttattt aaaaaaagga ttgnacctgg atccacttnc tggacntttt 540
 ttccggaanc cttttantt 559

<210> 8577

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8577

```
catctttaag attctatitt tctagaacca cttttggcac caaaatctgt atcagtcaga 60
ttcaactaga gaagcagaac cagtagggga tatattgaga ttatttgcaa ggaattgact 120
tcagtgattg taggagctgg ccagtcatgt ctaaactctg tgaggcaggc tatcagaagg 180
gcagactgtc aggaactntc gccaagcact gggctgctgt cctcaggcag aatttcttcc 240
tcagggaac ccttagctct gtcttttagg cttcttgact aatcagggtca ggctgaccca 300
gattatctga gataatctca cttacttagt caattgggaa tggacttctg tcacatctac 360
aaaatacctt cacagaaata cctagattag tggctgattg aattactggg tgactgnggc 420
ctagctaagc tgacacatnc naagaccatt cgacccacca caagccttgc tgaagcttaa 480
gggctttngg acaagcctta acctttttcc actgggggtcc cgggatgggc agnnttattt 540
ggctnaacct aaaatccc 558
```

<210> 8578

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8578

```
gtctggngcc attttattta atgcaaacac tagacagttt acaagtcaca cctggacaca 60
agcacgtgaa cagatgtaca gggaattctg gaattttgag atcagtcacc atttcttctt 120
cagggccctg gcaactgaacc ccagcccctg tcccagagcc tcccctntgg gtcccacccc 180
anaagccacg cacacctctt tccgcccage tttatctttc cttgagctgt gacttcaccc 240
agcatgtgct canagttgtt acaaattttc tctgccaaat taagctgaca gagattggcc 300
actttcaacc agtcctttca gtccactgtg tctcccctct cgcttgggac aggcccatgc 360
tggccagtgc aaccttcaga tagacacatg gtgaccagag cccgccaggc ttntgcaggt 420
ggcagtgtcg agcaagtgtg aagatgtctg tgggaaggag aagcttctgn aatgaacgtt 480
ntggaaacag aaagntnaag ggnctttcan gcattttcag gn 522
```

<210> 8579

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8579

```

aacagccttc accatctttt attcattctg ctgtgataca actaaaatgg ccagtaaatt   60
ctcccctggg tctcaggtaa cagttttcca aaagtgaagt atcactttct ctgcacagtg  120
gtgaaagccg gcatttggat gggctggatc ggggtggacag gctgaaacac tggcttcttt  180
ctcacttcan agtgtgtttt cactgcaggg agcagctgat tccttttgat gatctgtaag  240
gccagctgag tattaccatt ctgcagttca aggtagactg ccagcaagat ggcctcaggg  300
ggcacctctt taggatggat cattgaagcc gcctgggtgga gacactttcg ggctttgtca  360
tattcgtcc tcaggcagta agcgtgcc aagttgaaca gcatcacagt cctggcagag  420
ttgacggaac tggggtagca ctgaggggcc cgcttaccag angattccat tggttcattt  480
tcaccttgct ganccttggg cctgctcatt tgaagaaaan cctaaggnga cattagtgac  540
attttccgg g                                     551

```

<210> 8580

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8580

```

gtgaggttga aaagtcattc atacagagga ctttaatgag cattcagatt tttcacttgn   60
gatataattt acatacaaaa aatagcataa caaaaatata ttggaatata gtatagatac  120
atttacataa acattgcatg aatatcacag tggatatgta gagaagggtg ataaacctta  180
aaatgtaaaa tatcaaagga tcaaaaacat ctaaaactga cctggaatga attatttgta  240
attttaatat tctataaatc taagtacctt tttatgttaa acttaaaagc attataatgg  300
ttattaaata gaacaggggt caagcaaact tttcccagaa aaagttagat agtaaatatt  360
tcaggctttg tgagttacag agtttctatt gcaactaatc aatgctactg ctgtagtgca  420

```

aaaccagccn taggatacac gtaaaccaat gagentgact gggttcata gaacttattt 480
taaaaatagg cacaggnccg aatttggtn ctaggaccata nttgntgacc tttnaacaaa 540
naaa 544

<210> 8581

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8581

actttttaaa agttttattc agcaataaga ccataatttt tcatatttaa ggagtatgaa 60
aaatttgtgg agttttaaaa gctgaataca tgtagcgttg gatcaaggca catacaagac 120
tgGCCAAagg gcgtacaatg cactttggtt ttttgttgaa aaaaaaaaaat catggcaaca 180
gaaaagtgat atggtttttc aacaagtaac agctcacaat tcagtaggaa gctagaagga 240
aatgtttacat tacgagttca ttatataata tctggaaaat tgtgacagta atgggcagta 300
ttcttgatct ttgtaaaagt aaattgaaca tttatgtcag tgttaaaacc tttgacataa 360
accagatcta aatttgatgt ctagtattta tttttcttta aattatctct tatttaaaga 420
actactttct ctggaatggg gaagggaatc gcttataatt acnttcattt ttaatatgcc 480
tnaaagggtc tctgacatnc cttatgataa aacctcttaa cccttaccaa ttttgggggtt 540
aaaatcactt tttaaaaatc ngganggggt ng 572

<210> 8582

<211> 493

<212> DNA

<213> Homo sapiens

<400> 8582

gcaagttgaa tattttattta aaaataaatc tcaaaaatat ctattgacag tacagtaaga 60
ggggcatgtg caaacaacag aaaggggggaa gtcagtcctg ctgtgggaag cccacacatc 120

agtgtgttgg agcaaagttc acgaaggcca tgggctgact gagctgtggt gtacgaaatg 180
 acattcagct aatactggac tcggttcacc tttgacacct ggagaggtgg ggaagccagg 240
 ggggtggggag tccagctggg gatccttgtg tttaggaagg gggcggccaa gggatgagcc 300
 tttgggagag gccccgtgtg gcaggagggc tcatttcaca agccaacagg cctctagctc 360
 gccgctccag gtggatgttt ggtgacctga agggcccttt ccagtccaag ttggctttgc 420
 aatgggaggg gtaggtgcan cnagggtncn anagacagaa atcctcttta aaggaaaaac 480
 cnaccaccna acn 493

<210> 8583

<211> 429

<212> DNA

<213> Homo sapiens

<400> 8583

cttttttttt tttttttttt ttttcttggc aagcattcat ttattcacgt aacataagcc 60
 agacactatg ccaggggctg gcgatacaga aatgagtaag acatgatccc tggccccctcc 120
 catccctgga atgtctacta ggaagaagct gctagaaaaa gacaacatgc tacttttaag 180
 ccaagagggg ccagtctccc attccagctt ggtacacact gaacacattt gaggccttatg 240
 actggttctt ttacttacaa atattgttta gacacatttt caaatgtcac accaatcaat 300
 aataataagg aatggatttt atctatattg acagttcttt naaccttaag agtgaactgc 360
 tacaggtaag attcantcac atttttcagg agaaagctnt tngnaccaa atgcttnggn 420
 tatctaata 429

<210> 8584

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8584

caattctcac aagatttatt tataaataat gcaataaaaa tactagtaag ctctttatgg 60
 agttagacaa attgatacaa aaattcatgt agaaaaataa acacggaaga atagctagaa 120
 cacctgatat tctagtaaaa gaaaagccat aaggggtgtc tactcctatc acatattaaa 180
 tcattctata aaatctctgt aattaaaact gaaatattga cacatgaata aacagaaaga 240
 ctagtggaag agaagagaaa tctagaaata gacttaagtc cataaggaaa atcagtatat 300
 gatgaagggtg ttatctgaag tctactggagc atagatgggc tctctaatta aatgggtgctg 360
 gacaactggg tggccatttg gaaaaaaggt aagattagaa tccattcctc atgccatnca 420
 cacaattaac tccaaattta aagaagaatg acaattgaag aaagtgtgag agaattcctc 480
 tataaactca gtnttgagag agcnccgnaa acntaaagga ctgatcaatg gntcccgtaa 540
 aaaattaaa 549

<210> 8585

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8585

gtgattcagg gccgagcagg gctccctgga agccccctct tcctgccccca actttatttt 60
 ggttctagaa tcattccagt tggcataccc ggttcccacc acggctgtcc tgggcacaca 120
 gttaacatgt catgcagtta gggggaggga gagaggggag agggcagggg gggagtcagt 180
 ggccctgcacc gcacagccac tgggttagag aaagtcgggg tctcccaggc tgcaaagcct 240
 tgtccagcca tgtgtctcct ggccctgggc tgacctcctg ctgtggccat agggtagaca 300
 gcctggcctt ggggctgggc catggctgtg tcaggtaggg aaagccacca tcctgccttc 360
 agtcccctgg gcccttggtc tanccctct tccccatat cactggggat aatttgnttg 420
 cctgggtctn catagctcac cagttatgga ccaaangaac aagggcanc accctgaggg 480
 tncatgctgg caccttgnng tggccnacc 509

<210> 8586

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8586

```
cagattctga ggtctgtttg tgtttaatca gacaatatgc aaagtattta caaccaattc 60
tggatacccc cccaccccc gcaagtctgg gccttggaaat ttcggagccc caggcccggc 120
ccagagccag ggggtcccca ggcctctgca tagtcatctg aaatctacaa aacactgtta 180
aaaaaaaaaa aggacagtat taagacacct tacacaaagg gccttaggca gttggagagg 240
gatttgagag ctgctgggg tgagtgagcc cagatttgac tggaatggac gggagaagac 300
ttgggtaata aagacgtatg aaaggaaaag ttgaaatttc ataggcaggc actgcttggc 360
ctccttcccc actggcaggg cctggctggc tcaagaaccc ctggcagtgg gaatgttatt 420
gctatgatga gggggccatg gtgaaatgtc aacatgtttg ggggacggac cggggggaca 480
ttttacatgg taaatntggc ccncatgaga cccccccact tcccancctc ccccnncnccg 540
gg 542
```

<210> 8587

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8587

```
cagtatacac tctctttatt atgagaatga aaccaaataa taagcaaaat acatcaggaa 60
tttcaaattg tactgcaaag aaggtcccag ctggtctctt ctgggagtga tctaactaac 120
ttaagctgac cctgtgactg gctgaggata atcccttctg tccactgcac cgtgcaatgc 180
cacaggtcat gagatggatc gttcctcttg ctctgtgtcg tctgaagcaa gtcgaggccc 240
tacttctggg tccgcccttc ttccttgggc ttagatttgc tgggttagta gtttgctact 300
attgtcaaga ctgtactgtc cctttaaggt accacatgcc accatagctt acacagcagt 360
cctttagtac tttatccacc tcctgtttac tgagatcttc tccacactct tgagtcaacc 420
cgagactgga tcatgtttcg gcgtaccgg taatttttgg aaaaaatttc aagcaaaacc 480
```


tgatgatgct gatcactcat gctcncagan ttccaaangg ccaaacacct ttgntcatc 540
cggggaagca gcaant 556

<210> 8588

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8588

gttttattta ttcacttaca ggaaatataa acacaaattc taaaagtgtg aagttgcaaa 60
cgacaggcaa gttcacattt caattaatgt gaactgaaca agagttaag gtgattttta 120
aataccttcc acgtagaaa atccttcttt cttaaataag tttcatata aagccaagtc 180
cttgcaactt aacgacggtt ttacagtctt aagtgatttt agaaagtgtc cttgtttcac 240
tgtagttgcg tctagtccat tttcttgtag agccagcaaa gcagcttctg tgcanaggtt 300
tctaagatca gctccagaaa aaaaacaggt ttctgctgag aggttttcta aggagacatc 360
angccctatt ggcatggttt ttgtcagact tttaaaatag aaagcctgcc ttgggatctg 420
ggaggtgggg atatagatga tcttatctaa tcttccangt tcgtaacaaa ncagtatntt 480
aacacatcag gtctatttgn tgcttgcaat aatcntgaca cttnnggtta aaaaacttnt 540
tgaa 544

<210> 8589

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8589

gcaaggaagg aataagggga tttattgaaa atgaaagtac actccacagt gtgggagtgg 60
gcctgagcac aggggctcaa aacgcctttc ttgtttttgt atatagaaaa tatacatgct 120
ttctcatcta accgattttt tttttttttt tttttttaag acagagtccc actttgttgc 180

ccaggctgga gtgcagtagg catgatcttg gctcactgca acctccacct cctgggttca 240
 agcgattctc atgcctcaac caggcgccac cacacctggc taatttttgt atttttagta 300
 ganatggggt ttcaccatgt tggccaggct ggtcttgaac tcctgacctc aggtgatcca 360
 cccacctcgg cctcccaaag tgctgggatt acaggcgtga gccaccgcgc ctggcctcat 420
 ctaaccaatt tgggattctg gttggagttc angaaaaact aaagttccca ttactttcag 480
 aatatttttna aaataaaaaa tcctgatgac ttgtgangga aaaggaaaac atttnaaatc 540
 ctgactttct t 551

<210> 8590

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8590

accaatcttt atgtatttat tcacacattt gataaaaatg tcacagttag gagtgaatc 60
 attacaatga catgagtaac tgtacagaca gaccccaagt gcagaatcaa attgccctaa 120
 gtcagaacat ggagcaaccg caactccttc gcacttgtgc atgtgtgtgc gctcgcanac 180
 gcacacacac acacacatat tctctctctc tcttatgcac acatccatcc acatcccaac 240
 aattgcaggt gctaagtttg gacataaccg agggactcct ccctgacttc tgtcagggtcc 300
 tggaaagaag aagtaataaa tgaaaagcag ctgggactgc tcgatgcac tctcctcttc 360
 caacaatgac ncggagaagg caagacatac actggggcag ctacttcctt ggcacaaaaa 420
 tgaacaggca acaagaagggt aanggagtgt taagttaatc tcanggttaa accacttttn 480
 aacaccncca aaacagtanc angcaggaaa aaaaaaacgg ggtnccaaaa cttaac 536

<210> 8591

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8591

```

ggtattaaaa tgtctgtgat tacttatttc tcagcattca tctggtaact taagcagcat   60
gaagcaagag ttgcacttta aaaaatgaca agaaaatagc tattcattta gtcgacagag  120
taaggcccat ctcatttcca ggatcactag tttctgctta tgacggggtg agcatccgcc  180
agcgcggtga ttgggaggcg cccctgtgtc tttaggctga ggcagtgcc atagctgcag  240
tgcctcgagt ttccggagca accgcggggc tctttcttga ggagtcttgg gaggggcccgg  300
tggcctgcct ccccatccta gatcagcgag gtcccaanaa gtgccgtatt gctgcgggggt  360
aactgtggag tgtngacacg ttccgaggtg ggcttgacat cctgaggctt ggggtggtgtg  420
aaagggaaan gaaagaaggg cagggtcccc ggcttttctg ggctcttgct ttttaaggtca  480
ggnccntggg tctgcanagc natngcaccg gggctcttgc caaccnnggg ggnntccc   538

```

<210> 8592

<211> 549

<212> DNA

<213> Homo sapiens

<400> 8592

```

ctttttttga gacagggtct cccctctgtg cccaggctgg cgtccagtgg catgaccatg   60
tcccatcgca gccttgacct gccaggctca agcaatcctc ccatttcagc ctcccagagta  120
gctgggacta cagggtgtgca ccaccacgcc cagctaattt ttgtattttt ttgtaaagat  180
agggtttcat tatgttgccc aggctggtct caaactcctg ggctcaagcg atccaccac   240
ctcgatttcc caaagtgtg agattatagg cctgagccac catgcctggc tgcagatcct  300
tcataggttt cttaatctta agaacaaaaa gtcacctgg aaagcaagaa cacatcaatt  360
tggcagtatc tggctactaa aagaactgta tctctggagg caaagcatgg gctctaataa  420
acccacaaa gtattggccg ctaattccca aatattcctg actggctctt tcacaaagct  480
taaggagggt tcaattcaaa gaacatttaa agccctttgg cttggatagc agacagnaa  540
ccagacttt                                     549

```

<210> 8593

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8593

```

ggaattcaga ttttttattt ttggctctta ggaagtagtc agcaaatact gtataatccc 60
tagtagggaa ccatgtcata aaatatattg acatttctgc aacaaagaat cacactaaaa 120
ggaacacatc ataattaccc atagcttcct atcagtgtaa gttcagggtca ggtttggttt 180
caaatgggtt atgaaaatac ttttggtttt cagagcattg ggactttgga aatgaggacc 240
tggatcatcc tttattaggg agaaatagcc ccaggagcca cgtctcagca attccatgga 300
aacacaggtt tctttgccct caaaattccg ttcctacctt ctttgncttc cttcccccaa 360
agaaactgga caaaaaaggt cagaactgna tttgntattc atacatttgc gttgatttaa 420
atcattacgt acaatttcta cattggatta gaagaatgac acagggggca gcacactttt 480
gcagnccagc ctcatcctg acctggagca gggcctatgg tggcaaagga cgggntcct 539

```

<210> 8594

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8594

```

gtggttttta tagactttat attttagagc aatttttaggt ttacagcaaa attgagaggg 60
tacagagatt tcccatatag ttgttgctcc cacacatgca tagtctccac cattttcaac 120
atctcccacc aaagaggtag atttgagta attgatgaac ctacactgac acatcattat 180
cactcaaagt ccacagttaa cattagggtt cactcttggt gttgtacatt ttaggggggtt 240
ggacatatgt acaatgacag gtatttataa ttatagtatc atacagagta gtttcgctgc 300
cctaaaaatc ttctgtgctc caattattcc tccctcccct cccccacca ctgcttttta 360
ctgtctccat agttttgcct tttccagaat acatcccagt gtcatatagt tggcatcatt 420
taatatgaag ccttttcana ctggtttaat taagaggctt ccnttaagtn ccctgggaac 480

```

tttttaacct gggnacccaa aatggcatan cttgattnag cccctgaata atgactactg 540
caccacaatt ttn 553

<210> 8595

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8595

gctgcttaaa aaatgcatta atgttactgc tttattcaca ctaattagaa tacatacaca 60
aaaaatgtgt atcatatatac actttcaaaa atttccatgt tccatgagaa ctatgtaaac 120
antgcaaaat gttncacta cgtaacaaaa gaaaatcagc attcccacat agtattagga 180
aaatatnngg ataatctgaa tttatagtaa aacaaagtga tctgaatttg tagtaaaaca 240
aagtgaata ttacaaagca gtcttgtcat gaagtagcct tatataactc agaagcagca 300
catttcatac ttccaacac ttgtgtataa gtgaaattaa tagaaaaca aaagaagaag 360
aaaaaaacct ctactttggt ttccacatta ttggacttna gcaacaaggc aagtgcacag 420
gtanccttgg atgaccaaaa tggaaaacct tntnactnng cttggtttct ctttctggna 480
aatgggccgt gcttaggaaa agcggtttcc caaggacntt ttggaaaatt aaggnggcat 540
tttcactt 548

<210> 8596

<211> 519

<212> DNA

<213> Homo sapiens

<400> 8596

aaagttttat aaaaaactat ttcttgttct ttaagtaaag aacactatac aaagaaaata 60
tattngnaaa taccacagag acatggnttt tttttccct tgaaagatat gtccatccta 120
ggaaatgggtg gggggtggat gtggggggtg cagagtaggg cctagtcctt gttgncattn 180

ttgngngngn tattgattct ggaaggaccc tcgggtgccca atgaggctct ctaagccata 240
 atcttctgaa tgcagggcat gcagctcctt aaaagacana cagccctggg agaaaganaa 300
 gggaatatgt tctgaattca tttgactcag tttctcgcct gccaaagaaat ttcttncaag 360
 cagtgatggc tccttactca ttcngagatt aagaangatg gccaatTTTT caaaatcaaa 420
 tttgttcaaa acttnccatn gtcccccagg gatcaaggtc accctccttn attcngcatt 480
 aaaagtnttt catncttccc gttcttctcc ctctnttta 519

<210> 8597

<211> 450

<212> DNA

<213> Homo sapiens

<400> 8597

ggatttgttt ctctttttat ttaggtactt tctccaaaag tgattttagt ttgtatggaa 60
 aatcttctga tgctttgatg gtacatattc ttattaatgc cctcacatta gaataactat 120
 tttcagaaca taaaattgta ggttcaaagt ttttttcagg ttcaatttca cattcttgag 180
 ctaggcatgg tactgatggg tttcaccata acatacacca atgtcctttt gtctgtgggc 240
 tcccatccag cctgggtggc gaagtcactc acaggtaaga ttgaccaaac ctctgaacag 300
 gactgaaaaa aatgttatct tcagaaaacc agccctcttg tacactgctg ctgtgaatac 360
 aaattgatta acttttctgg atggcantct accaatgcag atcaaacatt ttaaaantcc 420
 nttttnttt gaacnaattt tttttcngn 450

<210> 8598

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8598

gagagagaaa ataattcact ttatataaat aacagctaag aacaacatac tgtgaacagt 60

ttccagagtt tgaacattca gcacaatcaa ttcttacttc ttgggaaaaa aatatcttac 120
 ctatcttttc tgttacagta tgccttcttg gagaaaatat tttagtggta acatcatttt 180
 ctggggcatt tgggttaattt tgaaagatga ttatgccaca tgaacaaaaa aaaaaaaaaa 240
 aaactggcag gaggaggagg gtcctaggcc attctggaag caagctgggt tttgcattat 300
 tcagagtcaa ctattaagct gacttatatt agaatggcga cagataagag gcaatgagtg 360
 acaccaggac atgcacagca cacagagaat atggcnctact cttggcttcc ctgcacagat 420
 taaacataag angcttggta gaaagacatg gggaaaggng ctatnggggc caccnttttg 480
 aagcatattht cccagngact tgggtnttgc tatgcaacct ctggaccaa aactgggaaa 540
 ggcccctttc ccccacag 558

<210> 8599

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8599

aattttgggg ctttattata atttttcttt ccaagatgct acatagtcaa acagaactgg 60
 gttaggtcttt tatggcataa aattaattca cagtcaaact ctcaactagt actagaagga 120
 ttcgctgaag agttttcttc ttcccttgct cccacccac aactgctggt gccctcgctt 180
 ctaaccctct gcagcccgat ccatttgctc tgactccagg ctaggtcccc aaggggaggt 240
 caggctcaga cttggacctg ggcgctggaa gtgtgagtaa tggttgagag gtggtataag 300
 aacaatctag aagactgact actcttcatt aaaaaaggta acctagagtt gactgtcact 360
 actgagaatt tccctcccta tgacagttgn tatttactga cccagaaaaa acacttcttg 420
 cagctcttct tcagcatccc aataaacccc accttcacat gacagactnt tcagaaacag 480
 aggacccaca gccttcagca gcaatnccag ttaaccaaca gagttaacaa cagcaacat 540
 taactgnctt ttgggaaa 558

<210> 8600

<211> 425

<212> DNA

<213> Homo sapiens

<400> 8600

```

caaactgaga aaaagcagtt ttaatagcac acacacacac acattcatag gactttaaca   60
agatgtagta taaaatcttt aaaaaaaaaa aaaaggaaag aaaaaaatct gtatttactt  120
cctaagagct ggtggattaa ctggctgaca ggactgccca ggaaaaacaa atgcacagat  180
aatgaggtgc gccgacactg ttcattgagta aggaataacc atggatcatg ctaactgctc  240
tacgtgcccc gccgcctgga ccctactgtt gcctccttag cgacaaacca ccacagtcac  300
cccctaattc tccaactcag tagcttggtt aatgggctac ctcttaaaat tttcattttt  360
aatttaaaaa ttactctngg nttaaagacn ccncacnttn ttactggcca gtcccnacca  420
attat                                                    425

```

<210> 8601

<211> 458

<212> DNA

<213> Homo sapiens

<400> 8601

```

caatgtcaaa atgtgtactg cactttataa aagcatggat aatattaaag gatcacaaaa   60
ggcagcatta gcattctcta tccaggtatt attaaatctt tttatcccat gccccctca  120
aatataggag aattattatc tgataagcct gaaacgactt ttttaatacc ataacctaaa  180
aagacacttc ttacaggtgt atgcaacttt ggtcagcaga aacacaatac gagcctctgg  240
cctagctaag gcactctatt ctgaaagtac ggaaaacatg cacgtatgct ccttatcatg  300
gcattgctcc ccaaaaggca gctcactgta tgctggggag aaaggctggg gcatgaagtc  360
accacaata tcatgcataa gcctgaaaga cctttcatac tttggaaatg ttatagtaat  420
tgcatgaca taaatgcnca cagntntntg nantgang                                458

```

<210> 8602

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8602

```

caacacaatg gccctgcctc ccaccgnttt atttctttcg gtttcggatg caaaacaaaa 60
aattttaaaa gaaaatgtga cttcaaagga aaagaacaaa tttccaaaga cttggggggag 120
tgaaggcaga gcctgggtgca natggacgag gtctgcagac ggagggcaga ggtggtggaa 180
ggggccaggg gcctgcaggc ctccccctgg aactgggact ggtctcggtc tgctgacgtc 240
agggtcagct cccccgcgga gctgacttca gcagcccaca gctgtggggc ttcagcagcc 300
acaccagccc agcccagccc agctctcgat acgtttggtc tttcatgctg aaaaataaat 360
aataaagcct gtcccggtgc tactgcctcc cccaactgca cagacgccag cctctaggcc 420
tgactgccaan ggaggtggaa aactggcac cagcccggca gccctacan gccccccana 480
tggctgccta atgcctctg aaactgcana tncittcaact tggccttccg gccttgggnc 540
annt 544

```

<210> 8603

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8603

```

gattgattga ttaatttatt atttttaaaa acttggaat tcataaacta ggataatcac 60
attctccttc cccatctctg ggtagtgcca tcattttaat aagcaatgct caaataacag 120
aatggaacct ttatcatggg gatggccctt gtacaacagg agtacaaagg gcttacaag 180
tgagtagact ggctcaaact aacaatcacc tttgctttgt tttagcactt tgcttacaag 240
tgaatgggct tctagggcta agttattagt tttcaattcc ttgtaattg ataccaaac 300
atatcaaaaa taataagcta aaacaatatt caaacccata ttttattggc tttattacac 360
acttcaatat ttacaaagtt aaagttaaat gaaaagtctc tattgtatta aaaaaataa 420

```

ctacagccca aattaaagt ccctggggca aatcatatca atcaactaag aatcagtgac 480
 tggatcaagg acccaggcca gtctctgngg tacaacaaaa gccggtttat tttggganca 540
 anggttggga ctctatacaa tccc 564

<210> 8604

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8604

gcaagataag gcactttgtt ttttaattcta tcagtctctt tagaatgaac aaaggtcttg 60
 gtcctctgga aatctcaagt ggtgctgcct gcagctttaa aaggctgagc acaaaccat 120
 cagagagcca cagtcctaag tagactcctc ggtgcgctct gccacactgt ccatgtgcat 180
 tcagatttct cattaaattt tccacagcat gaccagtggg gatgacctgg gtggcctttg 240
 tgtccatggc cacagcctag gtacccacct ggcatgggtc ctccacaggc gcagcgagcg 300
 gttttctggc ccccgtgga gcagaagggt cagcagtga acacgcctga gtgtgggcgg 360
 tgctttctcc tcaccgtcac agtgaatggc gagccctgca catgctgntc tttgatgcag 420
 acccacacag tatagacgcc aggttccttg ggggtttag gaaatgtagt atgtccatcc 480
 ttggtatcct ggaccattgg tctgactggg ctgctttctt aactttangg gcaacgggaa 540
 ctttgaacgt tgtntcctcc t 561

<210> 8605

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8605

catgtgaaac ctgtaacatt ttatngtta aaaatgaaca gcttcagaat agatctaaat 60
 gtaacttttc caaaaaacac caaaaagtnc agggtaaagc acctcctcgt taaatncaaa 120

ctttcatng gngatgcacg gcnccaatgt tttgcatatn ccttgatgca aagaaaagtt 180
 taagttgcat cctgttttta aaaaaanccg aaacttaaga actgaacaag gattacaacc 240
 acattccaat aaagaaaatt ttccttcaac aaagcatatt gttttgttta tatncaatat 300
 gngaccacca agagtttta tttagttgta ccaaaggcaa aacattntac ttaaaattaa 360
 attncngatg cntgaagaat aaaggtttaa ngttcaaaga ataattgggt atttaatgcn 420
 ctcaatgtca gtattttggg gcaattttta aaggttttcc caaaaaatgg nctggatagg 480
 ctttatccaa taatngggta agaacnggga aaatggaaac ncctttntnc catttttnc 540
 caaaccttt ttaaagacgg 560

<210> 8606

<211> 447

<212> DNA

<213> Homo sapiens

<400> 8606

agtagagatg gggtttcacc gtgtagcca gggtagctt gatctcctga cctcatgac 60
 cgcccgcctc ggcctcccaa agtgctggga ttacaggcgt gagccaccgc gcccgccat 120
 catttctatg ctaccatctc agcatctgtg gtgaggggag gggtagcact tcctctttgc 180
 ccagcgagag ggcgtactct accccagaga gggaaacacc atgccacag tgcttggttt 240
 tgcactcagg tgtgcgggca gcacagcagg cctcaccttg cagcactctg ggcacaatga 300
 cactgtccac tggggagctg cagagcttaa cagctggctg ggtctgccct cgggggaagg 360
 gaagagtttg cnaaaaaagg aggccctaag gtgagggaan tttggggccc accnnccagg 420
 tttaaagagg aaacctttta tnnncan 447

<210> 8607

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8607

```

attttttccc ttgacagtac tttattaatt ttcatccata tttacttga ctaaaaatac   60
aatgtatgaa aatttatctt taatagcatt ttccataagc tactataaca atttattgat  120
acatctggga ttcagccagg tcttatagta tttaaattta taaccctgc catgcttagc  180
attaagtaaa tcagtatgca agcagtattt aaggcaaagc tttagaata ctttaaattt  240
catttgtaaa tacatagatg caagactgtt tccataggaa gtcacaaatc ctcaaacaga  300
aatatgtgtg ttctcgatgt taccctgac agaaatcaaa cttggaagaa atatttttac  360
attagaaaaa ggactcagta taaggngaaa acaaaattnc cagtgggcta gacatgaaca  420
aaagtattca ttccccaan gcacattctt tatacaggtt tttcaaatta nctcctatta  480
atggaaggct tattcattaa atatgaaact atgcctacat taaaaccngg atttggtttn  540
aagggcttan                                     550

```

<210> 8608

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8608

```

atactgcaat gtacacattc ataagaaacg ttctaataac aattagcgca caaaactatt   60
ggtataaaca tttttccaaa aagagaaaac tattgcattt cgtagaaat cgcgtcctgg  120
gccgaggctc gtctttcttc tctgcagttg gtttggggac agaactccag cacgcagctg  180
tccaactgca gcggctacgt gtttccatgg agacaaactt ggtgtctcaa gttcagggct  240
tcgaaaagtc cgaatatattg tttgtcccga gagaagagtt ttgactttga agaggtccag  300
gtgggactcg ctgggggtgg ggtgctccgg gattagttca nagggaggtg tctggaagac  360
tccnggaacg ggacgcagca ctgntggttg gacncacccg gatgctgntt tcttgaagtg  420
tgcttgtgac actgacctgt tgacaaactc ttcacagccg nggcttgatg tgacgggnac  480
ttggcagaag tcccacatcc ttctggtgtg gtaaacttct gggttngatt tttgaaa   537

```

<210> 8609

<211> 426

<212> DNA

<213> Homo sapiens

<400> 8609

```

aatagagaca agttctcgct gtgttgccca ggctgggtctc gaactcctag gttcaagtga   60
tcctcctgcc ttgtcctgcc gaagtgctgg gattacaggc atgagccgcc acgcccagct  120
gagattacat tactttgagt gttaattcc actatgacag gaagtagcct aatacatact  180
ttttgtgtt aattttctgg attcatcctg attttttagtc ttcctacctg agtacaacaa  240
taaaggaaat cacttcttag atacattaaa attacttcta aacttgcccc ccacacatga  300
actgttttca gtttgctatt tttaatggnc catgcttatt tatatagaca tagcataaca  360
ctgtnnacac tttatnggcc actggcctct ttcttaanan tatantataa aaaaattttc  420
tatatt                                           426
    
```

<210> 8610

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8610

```

aaagtcata gattttaatg aaatttctat tcctgtctct gagcggctgc tgtgctttgt   60
ctgggtcccc caggggacaa gagtcaggct ggaatgagac ctctgtctgc caggcctttg  120
tggaggcctg ggaggagaaa ggccaaaggc tttgatgctt gggaccgatg cccggccact  180
cagctccaga caccagggat ctggcaaggg ggtggggcaa gggccagaca gaccaacagc  240
cttgggggtcc tggcgagagc tcgccaagac cagatctgaa gctggctggg ccaaagcagc  300
tgangcggca gcggcagaca ggtgccctgt gggcagaagc cagagcctac ttcggtganc  360
aagccnttaa gcttgggctt ggggtgcttg acttggacaa tgggtttgga actggccntt  420
ccttgggctt gactgnaact gccgtcccaa cggtgggtan ccactggnt caagtcaaag  480
taggcttcca naagagggtgc aagcagcanc actggaaaag gtgcaacccc caaagggaac  540
    
```

cggggtntna

550

<210> 8611

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8611

```

ccaaagaagc cccatthttat tacagagaaa atacaaagcc gtttcctcac agggaaaagt 60
acagtthccc ttctccaggg tgacagatga gcctthttccg aagttctcag ctttctcttc 120
tatcgaaact tcccatgtcg gttaaagtgt ttgtagagat agcggatgag tttattaagg 180
ttgtgcaggt catcagcgaa cattctactt ccaaccattt tcctctttcg gatacaacgt 240
tgcaattcat tccctthcca acctcgaagc catatgggccc ccctgatcag ttctthtggg 300
tgctthttcaa agthttcccag gatcccgatg ttgtcataca ctccgaacat ggccccttht 360
tcgtthccaac gatcaaccac thtggggggc gggagagtga gccttatacc gatcaatcta 420
ggcacaccaa gagagaagct tctgcacgcc agangcaccc agtnccaagg cgcctacctg 480
ccccggataa gaggtncctg gcattthctt aagtctcccc cthtaaacag gncancaa 540
aaccagagaa gatgccngga ccng 564

```

<210> 8612

<211> 503

<212> DNA

<213> Homo sapiens

<400> 8612

```

gacaggacaa ggtthattgg ggtcctgga aacactgggg agaggacna gggggcaagg 60
tcgaggctna caggggcacc ccctagccaa atgccccctt cccctaggga ttgggaggaa 120
gacagagaca gacaaaccaa cagagatgga gagaagacc aacggatgct acggagagag 180
ggaaggaaac ccagtggtcc accacctncc actcagatga gttcacagga taaagaattg 240

```

cgtggaccgg tccacacgct ncaggaaaag agaggagtgt ccgccctatt cactctaagg 300
 aaggtggcag gccacagcct aaaccagccc attccatgtg atgggggtgt ntgcacatag 360
 atcaagtcca ttctactggg caaggggatt tcaggccagt ctattctant gtttgggggc 420
 cggggaaaat cgttaggggc gatccattcc cantcgggga ggggggattn nanggcangg 480
 ggcatTTTTcc ttggnccctt ttt 503

<210> 8613

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8613

ggacagcatt tcattttatt atgtaactgt agaaagcctt gatcaagata aaaataggga 60
 tgacttatca gaaactgaag aattttctta ggaaagcaaa gtttactgaa ggataccttc 120
 attccagcca tgatgagcat ctgtcttctc aggcaatcat gatgaagctc cagggacagt 180
 ataaccctac tctcccactc atccctgagc cttggtcctg gactgaatgt ggtagaggt 240
 tgtggaaata aaaaaaagaa ccaaaataag aacactctcc ataaaagcca agctcagaga 300
 ctggctctct tttgcttagg tacaacagga gcaggaagga tcaacattct tgaaagcata 360
 ccttctattc atttggtttt ttttgacttg gggcgccagt gtagagctga gcactccact 420
 gccctttctc cactcacaaa tgtctgcata ggtcacgtcc ggcactttca agcctccttc 480
 acgtcaactc ctggggcttt tcggnngcca tcagtaggnc atataagntg naccttgggt 540
 ttactcctnt 550

<210> 8614

<211> 251

<212> DNA

<213> Homo sapiens

<400> 8614

gaagtatttt tgttttttta tatacagaat acaggaaagt ttctgtaaag tctaaaacat 60
 tacaattact atgtacattg gtactggttg ggggggtggg aggagaggag ggaaccaggg 120
 gcaggaggaa gaggagagaa ctggcaagag aacaaaataa ggagacanaa caggnttacg 180
 acaaaaacat ttngctacn atagacaatt tganaaaacg ctctaccaca tgtagtactg 240
 tacacggntt t 251

<210> 8615

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8615

caatcaacgt gttcacacac agcatttatt ttgtaagatt aatttttaca aaccatccac 60
 aacttggtca aaccttnggc tttatcctat ctaatttcaa acaaatgccc agccttaatt 120
 tattacaatt atgattcgta gactttcact caattacata aattcactct cggttgagga 180
 aaagagagag gtggcagagg attaatccaa aggatcctgg ngtcactac cttcaaagc 240
 cagaccctgg tggggcaagt cctgccaaagt catcaggtgc tgattaaatg cagggcactg 300
 ggtgggaagc aaattcctaa aatgtggttc tticcagaag catcttataa tctagctcag 360
 gggcttgag gctccaactc actccggaat cacctgggga gcttctgaaa ccattctgat 420
 cctgaactcc ccctaaataa atcaaactct ttgggccata aactgnaana aaaaagttta 480
 atcttcacag gacattctaa tggggcagcc cnagaggnga tcccctggtc tanggttttc 540
 atnaaatacc ttanaaatg 560

<210> 8616

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8616

agtccagaat ttcccaaatt tatgtgaaca tgggacatca tttttcatag cacacacgtg 60
 aacaagccat tattctttta acaaggtatt acaaactcaa ccactctgga gaactgatga 120
 gcgcctaact gaaattatta gactaaattc ttagtaaaca atgttttctg aaccttggtc 180
 agaaatataa tcactgcaaa ttattttcca agtggtgttc taaaaaaca tataactgga 240
 cactagtaag aaagtaaggt aaattattaa tccactcgca ttcaattcta caaggaatga 300
 aaccattttt aaaagtggct tagaacaac aatttactga gcacttacta tgcacccacc 360
 aggtatattc cttttataat gtaatcttca aaatgagctg tcaaactatt ggcccathtt 420
 gtgaatgagg aaaatgaaaa ttaagttata taatcatgag tggcagagct gggaaatgaa 480
 ctcaagtctg ngactntgaa gacctgaaaa aggtncncct ttcanatgaa tggcttaact 540
 atcttatggg attacctgga a 561

<210> 8617

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8617

aggCggcagg atgctggttt atttactgta ggatctccag ggccatcaaa gccccctcgt 60
 gggatagggg gactattttac acagccaggg aggagggcag ccaggaggca gagaccgggt 120
 cccgtatttc cctctgcccg aatgaggagg ggaggggcgt cctgggtcct gcagctgtag 180
 tcttgggggt cagatggaaa cttcatactc ccgcgtatcc ccagcttcat acagcgggtt 240
 gctgaagtcc gactccacgg tgatggggct gtaggagtgg gagcccgaga agccgaaaag 300
 ggactttccc tgaagcttgg tgtagtagat gtaaacgcca ctgccgagga caatgaccaa 360
 gcctagaggc agcaggatgg ccagggccag gttccccctt tccagctgcc gtgatggatc 420
 tgttgtctgg gtcacttcag ttttcgngtg tccaggagct cctcatangc aactttgcag 480
 antgggggct ggcttggnc cactgggaagg gtggnccggc acacaggtga tggatgaactt 540
 ncccataact naaagcccta tn 562

<210> 8618

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8618

```
agggtaagtc agtttattga tgtgttgtga tccatcaccc agatatatta aacacaaagt   60
acttaagtaa ttcaggattt ctttccaga aacaaagcag gaataaaaac cactatgaca  120
atataaaacc tttgtacatt tttaggtatt tttcccttca atatttaaatt aaacatgatt  180
tcttctggca tgtattttaat gttaagtga catgatttta attagtcttt ttttatcggt  240
atttcagcca ttataaaagc cataaatgtg tttccagaaa aagtgccttt gatattatta  300
cagtattctc tcataaaata ggaggtacgc ttgtgagttt agtactttag ttgtaggcac  360
agcttgaca tgtgtgtcgc tgatgtgaaa cactgcctt tttgattcca tttcaaaatc  420
ttgtggaata tcaccgtgaa gaacangatt agagagatga ctatttgcgg gtcttgcctt  480
ggcataagca gtgtaatgcc ccgacctata gtccnctgng gtcaacaacc tccntttagg  540
gatnagtcct                                     550
```

<210> 8619

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8619

```
aagtttttct tttttgagag gctcatgaaa ttcaaaagg accactagct aatttcaacc   60
atgcttcaca aaacaataat ggctatttta tattgcagtt accaatgtaa tgcaattagt  120
gctttaaaat aatctacact caaaaaaaga gagagaaaga gagagacctt tggaggaaat  180
atgcttattc aaaagcttct tggaaaagaa aatttacctg aatatcaagt catgactgat  240
ctcaagtgta atgtttaaaa gcttcacaga catgaatatt acaatcttca ggtctcagga  300
cttttaattc gagaaagttt agagtttggg ttgtttttta aattcacttt ctaacaaaaa  360
caaataatag aagtactcaa attttacta tttacaactc tcagcctaca atctgaaatg  420
```

acacaataca agttctctta aactgcagca ttaaagggtg ggcacacccat tcttctgctg 480
ctcgattgnc atccactgga acncacnttg aaaatattta tggtagtaaa atgatcnctc 540
ctgtnccttc aatngccaaa 560

<210> 8620

<211> 528

<212> DNA

<213> Homo sapiens

<400> 8620

aagttgtaaa atatttttta ttgtaaaaac aaagtcaata aaggttgaca atgtaaatgt 60
tatctcacia catttcccct tggttcctga atttgctaga ttcctatgta ccagcaaadc 120
tccattagca tttctcaggt ttcattgatcc ttttcagata tgttggttga ttttatgtat 180
atattgctta gaaacaaaaa tccacctgat attaaaacaa accaaaaaaa atcataaaag 240
caagcaaatg aacaaaaaac cctagtcttg ttgtgctttt ctttcacatt tcttacaggg 300
agatttgat atctcagata ctttcaaaat ctaataggta agtaaaatta gtgccttaac 360
caaacagtaa ggataccaaa gaatcctcca tcacaagtta ctgaatcaaa cttctcatga 420
catttgcn gn atattcagat ttgaagattt ttaaatttag aatttaaacc aacttttagac 480
tgctgatttn catattcaag actggaagtt gntgcagcat ataaangg 528

<210> 8621

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8621

atactaaaag tctgtattta cctaatttag cagtttgaaa tgaatattgt aggttaagttt 60
tacatgatca tatctgtaaa atggaacaag ggatattaaa tcataaaata agactttcca 120
acatttggtc tggatactga attagtatga cacataatat tctaaaactt tgctttctct 180

atgctggctt ttctcaacta aatgaaagca agatatgatt tttggatgct taaatagtag 240
 ctaggtattc tcttattcca gaacacagaa aaaaaagcc attaaatgtg ccaccataaa 300
 taaaattttg ttactatfff aagtctaaaa ataacagtaa tataatcatg attcatttta 360
 catgtttctg aatttatatt atcaaccag agaaagggtt atatcagaca ggtaggaaac 420
 ctctgacaac gacagaagaa gtgaactgcc aaaaccatgc tgaagnggtc tttaccctcc 480
 gcttggcact ggancangga ngtgccgcac acctggcttg gtcacctgnt tggt 534

<210> 8622

<211> 520

<212> DNA

<213> Homo sapiens

<400> 8622

actgacagga aaacatttta attcaaact ntaccactac ccagcctgaa gcaaagtta 60
 aaaaaagaaa gaaagaaaga aagacncaa aatacaagcn caactcat tttcaaataa 120
 aggaaactnt tgctaaataa gtagcaatta tgctgaanaa tttatatgct aaagcacgaa 180
 tgaatntaaa aacaccagag cagtcaacca tagctttagc actttgagta tgattaacag 240
 aatgaacttc caaaggncaa ttaaatgtng acacacttta aagagatatt nttaagcctg 300
 gtcaatgtat aacagcacct nttaattcag gggtatncgg nttaatttag gcataacatg 360
 catgggataa atgtacatat atntncngaa ttaccacatg tcttcnacca gattactaca 420
 gaaacttcat gtatcaccta cccctaagag gttttggcta tgtagtnttc caggttntga 480
 aatggattaa aggaaacctt aatftttttn ctttgggnacn 520

<210> 8623

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8623

aaaaatctct agtttatctc taacaaacac cacttgatgc ttgactcaca ggctttatct 60
 acatttgtct acagtatcat ttccttatga aatgaactag tacagcttag ttaaaccaaa 120
 tgaaatcata atcatcagaa ttgtctgtaa actactatta gctaaattat aaccttgcac 180
 ttgcttagta cagccaaagt tttaaatata gaaagcaca gaataaacca atggtaacat 240
 gtagaatcta gatcgctggg gcaatttaga aggtagactt tcaaaaagtc tgaggcaca 300
 ttacaagtga gtaaaagttc ttgtgcaacc tacataaacg cagcanagaa acttatgaca 360
 taaacatgg gaaagctcct gtaaaaaata tttatcanaa tttttctac ataaggatat 420
 tttngctttc attttttaga tcagcctnga ngagaaaaaa cattcctttt aaagtnaaaa 480
 catatatttt tggtttgggt ttgcctatga aatatcttaa aaatgnnggn aatttttatt 540
 t 541

<210> 8624

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8624

ccatattttt aaaatacttt attttttaca taatactgtc attacaaaaa aatacaaaaa 60
 aactactata aaaacattcg ggggttgtca aagtgagaaa acctaaagac cccaccccag 120
 gatctggctg aagcagtcct cccccagctt cttcactatg acctttatac aactatgggg 180
 gtgggggtggg atcacacagg cataaaaggg ctggaaattc cccacacagc ctccaagggt 240
 aagaaatgag tagcttcaca tatcacaaa gtgggatttg gaagtttggg ggtggctagg 300
 ccctgagttc agaggtgtgg ggaaaaacct gtgacctga atctcttggg ggggaatagc 360
 tgccacctga ccccaaagcc cttcccttc ctgatgaagc tggtagatgg gccctgtccc 420
 caccttttag ccttaatcct naggccatt tcctggcctt cacccttgga acacttctgg 480
 aaaaccagca gggaggacag aancctcagn ttttggangn ggaggg 526

<210> 8625

<211> 511

<212> DNA

<213> Homo sapiens

<400> 8625

```

cttaacactg cttttattaa caagtcagct tcatatatga aaggctcatg cttctaagtt 60
gcaaattgta ctgctactaa gagtcacgt gaatgaaaac acagcaatat ttcaatatac 120
cagaatttcc caaagggtgt tctttagaac acaagttcct tgcagtgtta ctaggtgccca 180
ctcaaaaaag tttctgtggt caaattaatc tggaaaacac tgggctaact gacagtagat 240
atttgttggt tttttctctc ctcacaggac atttaaatta gagcctttga tgtgctcatg 300
ttcactaact ttctaagatg gnatgtgttt tccaaactta tttcatccta gaatcctata 360
tttagaagag catctttgga acttnggttc tttagaacac actttgggaa aacttggatt 420
ctattatttc tacagctaac tagcccaaaa ggctagctat caatggctta atncagangg 480
catttaaccn ggcttngntc taccagcntn g 511

```

<210> 8626

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8626

```

aatttcttca aagcaacttg aacttttaat aaataatcat aataagttac agcaaccatt 60
tattctctgc tatatgctag atattttact tgacttattt ttaatcttta ctgtaacaca 120
tctaggcaaa atattaatat acctatttta caaaaaagga aacacactca gcaattttta 180
gggaccagg agccagaatt ccatttcttc caatttcctt caatnggttc acgatgtatc 240
aagtaactcg ttcatttagt caagcaacca ttttagctga tttagtcact gattcaacta 300
ataacattta ctcattgnct tagatttggg aggcatagct tgatagctgc aaggattatg 360
ttaaatgtca gtgaaataat ggaatgtgga ttggctcatt tcactttaa gatcctgctc 420
acagggcacc aaacattaaa ctaggtttta aaattaaaat ggtngacatt ttctngngcc 480
agaaacttng ggtcaatttg ggaangtttg gtggggnaat ccaaaacatg 530

```

<210> 8627

<211> 515

<212> DNA

<213> Homo sapiens

<400> 8627

```

gagagggagt ctcgctctgt cgccaggctg gagtgcagtg gcgtgatctc ggctcactgc   60
aacctccacc tcctgggttc aagtgattct cctgcctcag cctccctagt agttgggact  120
acaggcatgc gccaccacgc ccagctaatt ttgtatttt taatagagac agggtttcac  180
catgttggcc aggatgggtc cgatctcttg acctgtgat ccaccgcct ccacctccca  240
aagtgtctggg attacaggtg tgagccaccg ngcccggcta attttttgta tttttgtat  300
ttttaagttg agatgggggt tcacatgta gaccagggtg gttttgaact cctgacctca  360
aatgatctac ctgtctcagc ctncagant gctgggatta cacacatgag ccactgcgcc  420
ggcatatgta acattttaaa tacctgactt ncttaacata aagnagaca gcntaagggn  480
gctggcnctt gggaaagggn tttccttttc ttttt                                     515

```

<210> 8628

<211> 470

<212> DNA

<213> Homo sapiens

<400> 8628

```

caactattta aaaacgtaaa aactattctt aggttgaaga ccaccagaa gcagggtggtg   60
tgctagattt ggcccatagt ccaaccgtac tttctgtgat gatggaaatg ttcaatattt  120
cctcaattgt ctaatatggt aaccactagc cacatgtggc tactgatcat ttgaaagggtg  180
gttacatgga ctgagaaact gttttttttt tttttttgag atggagtctc gctctgtcnc  240
cccagctgga gtgcagnggc nccatctcgg ctactgcaa gctccgcctc ccgggttcac  300
gccgttctcc tgcctcagcc tccaagtag ctgggactac aggcgcctgg ctaatttttt  360

```

ctatTTTTtag tggagacggg gcctcaccgt attanccagg atggctngat ctccttgacc 420
ttcngatct gccncttgg ccttccaaag ngctgggant cccggggnta 470

<210> 8629

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8629

accagaacat cacataagtt tatttcagat gtaacagcaa tgttaaaatt gacaagttta 60
attcttaact gcaccaagta aacttagcca ttttaagtatt tttttaagtt attccctcca 120
aaaaactgag ggagcttttc tttccacca ccacaccatg gtttcccaat agttctcttt 180
ttggaggact tttcaattga tgagtaaact gctttagata tttcagaact tcattcccca 240
aatgaaagct aatctggaca aactatatat tgcatagatt tctctacaga ttctttgctt 300
taaaacctaa atgcaactaa catagtgtaa ttttaaccta ttgccccac agtaaaaact 360
atctgtcctg aaaaatatga tggatatatc ctgngathtt ccagttaaca gaattgggtct 420
acttcaaaga taattattat catatatcaa aataccagct taacatangg acattcttca 480
gtcnttactg actcataggc atatgaacct tggngcccag ctttttaacc tnttccacaa 540
tcttcctcct cctc 554

<210> 8630

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8630

gaaagtaaaa tttcagtttag tttatttagt ctttacactt aaaaactgaa gctacagaca 60
cacacataca cgcacacata cacatataca tatacgatac acacaaacaa aatagagcag 120
ttccatgaaa tcagacatat acgggaatgt cttgattacc caacaaatcc tctccccttc 180

cttccctcat caaattgcta tgattgaagg cccaggaagc taccaactac ttagggcttt 240
tagagtcata cacatgttgc atcctgttaa cttgggtgtg gtgctgttgc tcacagtaag 300
aaaaatggca atatccccag agacagcaaa gtattttgca tgtttatgtc tgtgagttaa 360
ctgtcaccac atattgcctg ctgtcttcat caatgcagct catagtaccc aaaaatgtga 420
aaaaatccta tccaaaacag atgnngcttt ttacatacaa attgggtaga acgcanagcc 480
tgatgatgaa agggtcattt tttactggna ggnntaaaaa atttaaattt tgaaaatcag 540
gttnggn 547

<210> 8631

<211> 415

<212> DNA

<213> Homo sapiens

<400> 8631

caagttgctc acatitttagt tggaaagtca gatcatgcca aagaattctc taaaacattt 60
gtaagtttag agcaagctac caatgggaga aaggctcagt gaagtctact ttttattatg 120
ttttccttat atgggtgtcag ctaataagta tttggggaat aaatgtgtag atagtggctc 180
gtttaaaaga agttacatta tttggcattt attacattt atttttctta attgattaat 240
tgcagttaaa ttaccttagc atgcaagagc agattttaca gattttgacg tatgattaag 300
cagcataaag cataactaat gnggttttag tggcatgcta tgtattaagg cntgaaattt 360
aaatcccccc ttcatacaaga ttttttgcag ttccggggaa tttnnaangat cnnat 415

<210> 8632

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8632

ccagttctga caccttttta atagaaatca ctgttttttag gaaacaaata gcacttttgt 60

aatttttttt tacaatgttt cttaccttga tcttaattta agtaacncta ggaagacctc 120
aatatctttt attttccttt ttaatttaaa aaaaagtttt ttttccccag atncaaagat 180
ttttgccctt gcataaaaaa acagtgcccg aacgatgacn caaggactca caaagactca 240
cgggacctca ctgacnctat gattcctact ctaccatgca aggtcttggc tacccttaat 300
tggactgtca gcctgaaaaa cagcttttct attccttatt ttagtttttg ttaccaagaa 360
agtaaaatga acagtaaaat aaaactttcc ttaaagaaaa aangaacaaa nccnaaaatt 420
aangaaagag aaaagaaacg tctncattca attcacacac cctngggccc ggtgctggtt 480
tactcaaaaa cticccttct tataaattna gaaa 514

<210> 8633

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8633

acattttcct ttttttttat ggcatagttc tagaattgaa agtgaaaaat tctgtttcag 60
catgttctct gcacctccaa attttcttgg ctattaccag tagttcctta tacgcaaaca 120
tatgagaaat ctctgaagag caaattcagt ttcgaaaaac agctaataat atcgaagaaa 180
agtaggcact ggtggatact ttctagaaga cagtattaat acagcaatac ttttaggaata 240
atgatgaatc tgtttaaagg caaaacatca ctaacctaat cagatcactt agagaaataa 300
gtgattttct ctgtcttata ctgagatcat atagccattt aacctatctt caaacagaca 360
naaattttta aacactttct atcctttaag aaaatcttct ttgcttggct aaatgacaat 420
gttcangaaa tgcctgccac agaagcntan aaaatccttg gcaaccattt cagaagaaan 480
ttaccctgc ataaatgggt ttccagcaac cgcttcaata agctttt 527

<210> 8634

<211> 519

<212> DNA

<213> Homo sapiens

<400> 8634

```
atcaaacaca aatttatatc aagattaact ttttcaacca gcttacaagc agacttttcc 60
ctttctttgt taaaaaatga atggtatgaa actatatgtt aaagatgttt ctataatacc 120
ttacatttac atagcgcttt acaattttca aagtgccttc acatgccatc tcattttaac 180
ctcacaacag ccctgtgagg taggtacagc aggtattatt atcctcattt caagatgagg 240
aaattgaggc aaagagaggt taagtgactt gcccaagatc acacagctgt aagtgcctaga 300
gctaggacct gaaatcaagt ttttgactc cttgtccagt actcattcca ctgtaattac 360
tgcctcaagt tatgaataat gaactgtgta tcaaaattga aagcttactg aagttcattt 420
cagtgatgtc ttaacagtaa agttaaatga gaaatncaga acagtaggct gatgggtttac 480
ttgacataaa atggtgcaaa ncactttggc taatacttg 519
```

<210> 8635

<211> 510

<212> DNA

<213> Homo sapiens

<400> 8635

```
gaaaccaatg cattctttat tgcagactga agcttagggg ctcacccact gtgagctctg 60
atttgggggc atctgtggct gccacactt tccaagacag acaagggcaa actctccaag 120
cagaggagaa aacaacttcc agaagctgcc cttcaaagg cctgaggtga ggacctgggg 180
cagcaggcag cttggcatgc aggggttaac cagaaaggcc gggctctggag ggctgggcac 240
acctaacct catctcctgg tgactgcagg tccactccc ttcttcagga gtgccatgca 300
gactctggaa caatctaaca ggccaagtgt ctcccagggt gggtaggga ggaggctnaa 360
cacaggctca gatccctgga agtggcaggg agagaactga gagaaacttc accctctgct 420
cggaggacat tccaagcct aggtccttgc ttcttaaact ctaaagtgt tataggaatc 480
aacttggggg tctttgctaa aatgcagggt 510
```

<210> 8636

<211> 424

<212> DNA

<213> Homo sapiens

<400> 8636

```
gaagttagag atgacaattt tgagatttat tctttatcag gagatgcaaa ctcaaatacc 60
tccagaatga aggcaggtaa tgcaaatgag gattaagtat aattaataaaa aacagcattc 120
atccttaata aatggcatgt accactttgt ctacagcagg atgcagtagg taaaggtgga 180
gactgtggtg agctagagga cgtaccccct gtcttagggg ccagtcattg ccaaatagaa 240
gtgtgggatc agtgtaaca gatcttctgg ttttagaga gaaactatag atattttcat 300
tttgacactt tctaattatt aaatgttcac aatgaatttt ttaagtgctt aaacactata 360
cagacaaaac catttgnatc tatggncaac ttngccttgg gggnttctaa ttngngactt 420
ntaa 424
```

<210> 8637

<211> 518

<212> DNA

<213> Homo sapiens

<400> 8637

```
ccaaatgggc atttattatt tgcacagatn cataaaaatg attcccatTT taaaaacat 60
aataaaaata tacattaacc acagaagtac ttactctaac tggaaagaaa atgaacatgg 120
ctattttcaa aacagtaata aacacaaaag gtcaacatac ataatcatg acaagtgtac 180
atctcatttt tgacaaaaat aagttccatt ttacattaa tgcttcatca tcaggctcca 240
tattacatcc tctgacctta ttacattta ctatcaaatt tctattagca tgtgtcactc 300
aaaggcactc aattcagagg gtaaaaagtc ctgagcttaa gtaggaaaca aagttcccaa 360
ctaaaatttg aacataaata attctaaaga tcagagaata ttaaaatgtt taaaactata 420
atatctggtc cataaataat tcaaaccta ataataaagg tgtcangact ggtcaaagaa 480
aagancctgt taggcagaaa aattcctngg aatnaacc 518
```

<210> 8638

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8638

```

aataggaag attttaataa cagtcagtcc ctatagtccc cttgtctaga acaattaaat   60
tattatccct cagacagtac aagacttgtc agtagactgt ggggaagttg atgagttgac  120
accagggcta gtggcatttg ttttggggaa gacagtgggc ttgggccgtg tggctggtgg  180
tttgaccggg gcagccatct tgacagactt gacaggccgg aaggcgcagg cgatgtcccc  240
agcagtactg gcgctgcgct ggaaggcggg ctcggggtcc ttgaggagct ggggtgtgcag  300
agggctggag ggctctgacg tggggggccac cactggggag gttttgaggg gctccaaggt  360
gtccagaacc acgtcagggg tgtgtttgac actgctctgc cgttctaagt tcccgtagct  420
cattcanggc cgagttcatt gntgcctcaa taccctgagc aatgacctca nggtccatgg  480
gnccatgggt antggaactt tttgacctn ccgttgggga anct                      524

```

<210> 8639

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8639

```

acagatcaca ggaattttta attgcagatc agtcatgcta cttgggggtga tcagaaagac   60
ttgaacactt accaagtga taattttatt aaggtcctga aggtgagtgt ccggaggtgc  120
tgggtaaaac acatcacagg taagaaatgg gaaacctacc tcagcatttc tgaaaggcac  180
aatctatgga agggaaacct agcgtataa aacctcact ggatgtacat ggaaaggagt  240
atggtgagct atttcctttt taaaggatga gaccttcata aattggcccc tcggattctg  300
gtgattcccg ccgcaagcgc aaatgctcca gtgtgttatg aaaatggttt ggtaatctgc  360

```

tctggttctt cactgggatt caaagattcn ggaggtcttc tcgaatcttt tggataagct 420
 ggttttaaaaa cctgaattgg tacccgcac c attticcttt cataaaaaata gatatatctg 480
 gtcagaattt ctataaaaaag ctgcacttgt agaaganggg gtcc 524

<210> 8640

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8640

aacgttttca aataatttat taggaattta aaactgaaaa taaaacctgg aaaaagaagt 60
 tacagatgtg gagagaagag acaccggagg atggtaactt gctggcttcg aaacaccatg 120
 taacatctta aaaaaaaaaa aaatcccaaa gcaaatcaga aaacggaatt ccagggtcct 180
 gagcccatgg ttgggcccag tggggtggaa ggggtccgggt ntgagggaga gggaagctaa 240
 gtgtctcagg actcagctca aacgtgtaga aaattaaaaa tnaaaaccaa taaaatgcag 300
 cttctctttt attaggaaac atttaaaaaa aaaaaaccca aaacacgaac agccgngcat 360
 ntcagtaacc aagattattg cttttgggtt ctcanggctg atagggtaaa caccttacac 420
 aggccattna ctnttcaagg gtggggtttt ccggtngggg ccatgcttgg gnaaaaagct 480
 caggcctggg ncctaaaact gggggaaagg gcccccnaa ggggg 525

<210> 8641

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8641

ggttttgaaa acacacacct tagtgtactg aaagaaaaac aatttctttt aatttggttt 60
 gttgggtcca caccatct atcaatgtat gtgctattta caaataagtt ctatacagta 120
 tttttgcagt acctttgata attcctagac ctctattttc attctgtgta ttaatgtgaa 180

taacagatgg atattttaat atttaggcag atggtaaact ttcctatagg tcttgtgaga 240
cttcgtctta taggctgaac accattcaca aaatgtaata atgcttcatt ccttcagggtt 300
gaggtaaaga acttgagcaa ctggattagc aaagctgcaa agaataaat gtggcctaag 360
atgtaattat gttctctgcc cttcctttgg gccagggtag ttttgactt gacacaatgg 420
aaaataggcc attagcctg gaaattaaat ggtcttaacc ccaatcttac aggacnttaa 480
taggctttca cttggcntnt ttaagggnntt tcaacaaaac ctaa 524

<210> 8642

<211> 478

<212> DNA

<213> Homo sapiens

<400> 8642

ggaaacatcc tagtaaaaat ttattcagac aagaatcgtc aaaggatgct aaacctagga 60
ggggtagatt tgatgaggaa cagaattgtc aacaaggctc caaagtttct cctcaciaat 120
taccactaa ttgcaaaagg aaaaacaata acgatacact ggagaaactg gacatcttac 180
ccaagtgatc aaaattagca tcaccaataa gggacaaatg gacattctgt gcattctggat 240
gtatacctgc aatacatatc acttacagca tttcaaccct cactgcacta ccccaatcta 300
accatgagga aacatcagaa aaacccaaat agaaggatac tctatccttt agctgncctg 360
natttttcaa atatattact attataaaaa acnaagaaaa gctgaggaac tgnttcagaa 420
tanaagggtta ttgncattcc acntttggac cctagnnttg accgnggact tgaaaaaa 478

<210> 8643

<211> 459

<212> DNA

<213> Homo sapiens

<400> 8643

ccccgntttt catctgcaaa atgaggaact aaaatctggg aaaactacag agtcgcttgg 60

agggtaagcc anagggtcct tgcccttggt acaccccctg aaaacaaaac ctgacaaaac 120
 tcaatgngca ttaattagng canaaacaaa gacagattca gcaagngcaa aggngactac 180
 aattttccct tgtccttggg aagccagctc cctggtcgcc agtggcaggg tggcgcaggc 240
 tgcttgccctg acctgccagn tttgggcgcc acaggccact gggcaaggcc agntcctnta 300
 gctggaatct cggttcttct ggttccgcat cagggggctg tggcgcgca ggccctccat 360
 gctgtgccgc cagtgccagc agcttcggca aaaagtnttt gaaagcaaac ctgatctnga 420
 cagaanaaag gccnggcttg anaactggnn atttgaccc 459

<210> 8644

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8644

gtcatttagt tattctttta tcattattac tttaaaatac actaatacat tcttatctac 60
 ttccctccac cgacaaatat ttgctaaat taaaaggatc actggaagta ttatgacccc 120
 cctcgtcaca ggtggtcaga accaccacag ttttgtgaat gaatcagaga aggcaacatt 180
 tcatcaacga aaactcattt aggtttcaaa aggccagatg tagtacagaa tgcattattc 240
 tgactgtctt ctggaataga aaaattggaa aggatgaaag aaggaagtta gctccagctc 300
 cactgttacc ttggcaaccg tggccaatc acaggggcag aaattaattt tgtgcccgtg 360
 acataacgtg gcagaggagt ggggagccgt ggagtgggga gagaatgacg gctgggttta 420
 aatgctcaga angctagtgg ggaagggtcc aggtcaaccc gctgggtggt naatctaccg 480
 tnccaattan cactgggcc tttttcactg gaaggttnnga ttatggagag acnn 534

<210> 8645

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8645

```

aaatacattc aagtcagtgt taatatttatt actgaaaact gagtaaatta taaagtgcct 60
tttctcaaga aaactacaaa cagttttaga aatatatata ggatatttca gggttagaag 120
tcaaatttgt gtgttagggt acaagcttaa gaactctgga tgttgctgct ctaacaatgc 180
atttgtgatg gtgccatgtg atactaagaa gtcagtagaa tcccaccagt cctactgcct 240
cagatgagtc ttgtttcagt catgggttta caaagtcatt gagtgcctga ggacttggtt 300
tcctggaagt gattccctac ttgggtatgg caagaacaca tcagtagtgt aaaactgtca 360
tctgtagtag cactccatga tcatttcctg gatgaccact ttaaattata actcacagat 420
atgtggggat tctaagaatg gtatatgtgg ngaatagaac ctggatccaa acataccagt 480
tctgactcaa cacaatctct agttctccat tttanggatt aatcatatct a 531

```

<210> 8646

<211> 524

<212> DNA

<213> Homo sapiens

<400> 8646

```

attgctcttg atgctctact caatgtactg tccatatctt ttgtatttac ttcaaaggat 60
tctggatcag cagtataaat aagattctca gcatctgctt tacaatgggt gttagctaca 120
tgtcgacaca gcatcttttag ccagttttct tttggaagtt catctgatgt catctggaaa 180
ctgagtagca catttgccctg ctctgttggt ggcctcacia gcaaggcaaa agcattatgg 240
caatcttctg tctctcttat gtccaatacc ttcttaatct gagaaagagg cattaggtga 300
atatgcttaa gagaagctgg gggtcgggtt tggccatgag gactcctaaa agtgccaata 360
acctgtgcc gntttcttgc tatctctagg caatcattga agaggaagag aggtacttgg 420
tctcctctgn cacaaggggtg ctcacctaga gnaaatgggt caaccntgg cttacttgcg 480
ggagnaaatt aaagaattac ttgggcttcc nttacttaaa taan 524

```

<210> 8647

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8647

```

gccaatataa gaatcttatt tactgcttta gtcaagaagg agatgttatt tcacttgtga   60
cttcctccca agtgaatgag tatacaattt aacaaactaa cacagttcag tttattaagt  120
tacaatctgt aaccacctaa tgtagctcag tgtatggtgg atactagata taaacaagag  180
tagggaagtc tttggcacct gcatgatgcg tgccggcttt taaattcaga aagatgagaa  240
gctacaatgc aacttttttt ttaatctaca gataccgcca aaagaagaaa tgtttatcag  300
atthtgaatg catactggaa agttggccgg tggcagcttt tcacattaaa tttcatcaca  360
agtgaactt gattacagcc caaactagac aaggcaattc aagtgccng accctgaagt  420
ncacgtgaga ctacaggaga acctgcatta tgggtgcttg ccagccagtc tctttgaggn  480
actgcctgta acagtcaccg gttgtngggg agaaacaact tccntttttt tn          532

```

<210> 8648

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8648

```

gataaaggcg gcacttggca tctagtactc aaacaacttt atttcactag ccatgagcaa   60
aaagttgacc ggctccaggg gattttccat cctgccctct ccctgctggt ggctcccatg  120
atttggaat aacctcatgt tccacttggc agtgcctggc tttgtgcacc cacatggttt  180
tggcctgggt cccagtgaat atggtcctca cctggctggg gaacatggtt ctgagaggcc  240
ccttgatctg ccctggggac atgtgtggcc atgctaaggg ccctgcccac cttcacgtga  300
ctggccacct ctgccagggt gcaggcagct cctagcatgg agacatcctt catggaagtg  360
agctttccca cccacctnca taccacatt tctcagaaac agagttaaca gggaaccaag  420
agtcaagaag ccacagggt ggtaacgtgc ctacaggcca aantgngacc cttacctgaa  480
nagccnggcc accaaaggta tcaggaangg aaaaaatttg gcctggaatg agataggaca  540

```

agaaaaa

547

<210> 8649

<211> 520

<212> DNA

<213> Homo sapiens

<400> 8649

```

anaaagtagg tgccccaagc ttataggtgg ctgttaacat tgnnttattt cctttataca 60
aaaagtagaa atgacagaaa aaacactntt gacagaaaca ataccactga cctgatctca 120
tgaaggagct gagccaaatc tgcccacatt atggggaaag ggaggttcaa tcaacattag 180
caaatactca tgcaattgat gaaatataaa atggtatcag tggtttgggt aatgtcctgt 240
gggtaggggt aatcaatcta ctcttaaaaa acatacat tccaatcat gcttttaaac 300
ggcatntttt aaaaaaaciaa gttatatata cagatatcac cccaaaatga atcttttaca 360
gtctactact ataaatttaa ggcatcctga tattctgntc ttctgctggg gaggcattgg 420
tttcatgggt ctcttttcca aaaggattgc cnaaaanttc cataattttc caanggcttc 480
nngggaagaa aatttaaaan ggncttcca agaaaaagtt 520

```

<210> 8650

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8650

```

caacttaaaa agttatttat taaacaagtt aaacacanct aaaagtatat ttagagggtcc 60
aagattcaag tatttttgtc aaactttcta atggtaaggg gaatgataaa aattgaacag 120
atataaaaaa tattcttaaa caaatattaa agcacatgga aaattcagaa ataaaaacac 180
accaccatat aaagaaatca aaatatttca tatgttttta aatgcttatg gtatgagagc 240
caaattgtct atttccagggt taataaaciaa tatataagct caccttttta aaggtatcat 300

```

actttgtgtc atatagaaat aattttggaa acagtatgtg ttgggtgtgt aaattgtcca 360
 cattaagcaa aacatatattt acatatgaat attttcattt atacttactg gaaaacaaaa 420
 cagaaaaact tataatttaa acatcttgat ttgaaaatat tttggatttg ataagtctgg 480
 ttaatttcca caatgnancn gccaaagggg tnttcaaaga atggttattc aaaatttttt 540
 aaaaana 547

<210> 8651

<211> 492

<212> DNA

<213> Homo sapiens

<400> 8651

gttatggcaa agtaagcttt atttaattgg tagcaggaga gtcacaactt caaactccag 60
 aaaagatgaa gtaaatttgc aatgatttca tacaccaaga ttcttcctac ccaaagctga 120
 agatatattt tcaaggaaag gtgatggaaa gaaaaatggg gctcgcccaa gagattcttc 180
 catccagcag gcatatactt tgtctatcat gagtcaagcc ctgatccaaa ggcttggttaa 240
 ctcataatta cactaagcat ctctcctatg ccaagtaatg tggcaagtat tgtgagggaa 300
 atacaaatgc cctaattgtaa aaagttcatt ccagtgtagg ctgaccttct caaaatgggg 360
 tctggtcaga ttctccatgc taggctacag gaaagaaggc tgaagaagca aatttacaaa 420
 tcagtttgcc taccattgng aattngagcc aatgacttgg cattnccga agtccttana 480
 ccntntnaat cg 492

<210> 8652

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8652

ccaatgtact ataaataaac ctttacttaa gatcttgaaa tcaaaattag tttgtatagt 60

attcagaatc aaacctaattg acaaagcaag atgaaataac caacagcatc atcattatca 120
 gaatagtaac taacatttat ataaaagatt actatgtgtc agaaactaag ggctttcatt 180
 tcattcaatt ctcataacaa cctataaagt aggtactatc attatatcca ttttacagat 240
 gagtgaatga aggctagaat ttgggtcacc ggcccaacat gacccaacta ttagtagtag 300
 gtagagaagc ggggtctccga acctaggtaa tctggctttg gaatctgngc tcataaccac 360
 tgnngctataa tgtctctgat agcagctact aattaaaaaa taaaaaatgn atgnnttcct 420
 aactttaatc ccncngata gggatattct tgggtcattt atggctnaaa ttttnaaaaa 480
 ccttttcctt ttaaccttta cctatccnca atttgggtca ctggttttat ggg 533

<210> 8653

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8653

gacatctgta actttaattt aatacaaatt gatcataact cataaaatgg gcaacatttt 60
 aaataaaaaat actgctgggg tggcccagat tctggtagtt gaagggttgg ggtagggctg 120
 acaattcctt ttgccaagg gagggccggg tggcgggggc agccatttta agaacccccct 180
 gtgttttagct cttccggcta ctttgggatg gtgtgtttgt tcagagaccc caagtcaga 240
 atctaggccc caggactaga aagaaaagtc aaggccgggg agacatttag gctcagtctt 300
 gcagcccact cctccagttc ccacctctgg gcagggatag agccaagggg caggacaacc 360
 ctagatgtgg actccaccct ctcccagatt cttcacgatt ggatgctgtg gcagaaaaac 420
 gcangtgggg cttgnnttac ccaccctaac ttccttctan ggagatgaca ttttccaaac 480
 ttccttgcan ccaaggttct ggaactgact taagtcccc caaccgaatc tnttgaaaa 540
 attanaattn gggaccg 557

<210> 8654

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8654

```
cattctgatg gctcaatgtt tctgggatat aaactcatca ggcatgggaa ggatttccaa 60
at tt tggcaa tacactcaag ttatggtata aaaataacat ttgttttct ctcttttttc 120
tcattttaga cctaagagtt ttttgttata agacacccca gttaagaaat attgaaacat 180
aagagacttg accatcaagg gagaaaagaa gccaaagagtg aaaaatgcta tgaaagtaac 240
tccagacctg ggcggggcgg gaggtaggag gaataaggag aaaaggaggc ataagtggaa 300
aggccagggg cctgtcatct cagcagctcc gagacttgtc atgtttgaaa gtgcaaattgt 360
caatggattt taaccatctt gaggttgtga tcttttaaaa agctcaatga atgaggaagt 420
caattccttc aaatgcaaaa tagctggctt tctggctgga nggttgn tgg gtctggggna 480
tttctttccc atctaccttc tttccaccc caaccattt cccaagaaa ggtccaaang 540
gtgccanttt tgnncatt 558
```

<210> 8655

<211> 289

<212> DNA

<213> Homo sapiens

<400> 8655

```
atttattatc ttctttatta atactcacat gtaacctttg ctttttacac anaagtctgc 60
tttagaagaa tgcctcctcg gcttatcatg cccaatgggg ctttttgttt ctggaccact 120
tcccccttct ccacccccac ccccatcctc aaattactct taacatgttc acagatacca 180
cgaatatttt gtaaacanga tttgggttac tggaacttga tttcattaac atcccacttc 240
aaaatggaag gcaggnggng gacagggtna gaaatacnan anagaggac 289
```

<210> 8656

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8656

```
cgatagtga aatatacttt attttttaat acaatagctg ccagcaatat actggtgctg 60
atgttccaaa gataaaagaa aatacatgca ttctataata agctttcatt tgcctgttca 120
agaaattata aagaaaatac taagctaatt aatgataggc tcaaaaaatg cagtatactt 180
ataaaaagcc gctttcataa agccagtgtt tactaaatgt tagcatatca aagtgggaga 240
aacactgcca ttttaaagca ataaacttaa aatttcaaga aacagcctat gagaaatagc 300
acttcctata caaattaggt ataaaaaaat taccaaaaat gtattatagt cacaatcaca 360
gtctttggag tagtacgtag aaagtctggt ttgcttttg tcttttaaaa aagagtaaatt 420
acatagcaaa gttttatitt cagcaagttc atcctcctgt tagaacacaa ataattcctg 480
gtttagggtc tcaattaaaa aaaaccccga aaaacaaacn aaaacctgca nagtgctatt 540
cctcaacatg gctggtggga a 561
```

<210> 8657

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8657

```
aactatttaa ttcactcctt tattctggga tgtntattac agataacaca actcacaaat 60
ataccatcag acattgaaaa ctaaggccat tctgngagtt atttttaaaa cttgngttt 120
tgcncataat gatcttaaaa aaaaatgaat taccaaaacc aagattntnt tntaaaatga 180
aaatttaagt caggtacagg ataactttag ggctatatct aatctgaagc ttatcaggta 240
gcaaaaccat tttcgttttc tacagcataa ataacagctn taaggcaacc actacctnag 300
catgaagctc atttctccac gttagagtag tgnttacctg ctacagtgac cagngtttan 360
agaccatttc cttttcagta gcaaaagaga ctttacctaa gaaacacact acatactaca 420
gaatccttgg aacaagaaac agaaaggag ctgnaactaa ggccctgaaa gccattattt 480
gnataaagaa atgtaacnat ttnacaccaa caggttcctc cggnggagnt ttnt 534
```

<210> 8658

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8658

```

gtagtagct tttacttatt atttatgtac ttatTTTTtg agacagtctc actctgtcac   60
ccaggctgga gtgcagtggt gcaaccttga ctactacaa cctcctcctc ctgggttcaa  120
gtgattctcc tgcctcagcc tcatgagtag ctgggattac aggcgtgcac cacctcgctc  180
ggctaattgt ttttgttctt ttttgagatg gagtctcggt ctatctccca ggctggagtg  240
cagtggcacg atctcagctc accacaatct ccacctccca ggtttaagca attctcctgc  300
ctcagcctcc caagtagctg ggattacagg catgcaccac cacacctggc taatTTTTgt  360
atTTTTagta gaggcgaggt ttcactatgt tcgccaggat ggtcttgaac tcctgacctc  420
aggtgttctg cccaccttgg cctnccaaag tgttggggaa ttacaggggt gaaccaccgt  480
gcccgggctt tttggaattt ttagtanaaa anggggttna ccatgttggc caagctgggc  540
ttgaacc                                           547
    
```

<210> 8659

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8659

```

aatataagat ttcatatTTa ttttggTcaa aattcataaa catatgagca ttttctgtat   60
aacgtgcttc cttgtattgt ttgatattac aacatagtct tcaaataaggg tccatagggc  120
agaaacatca aaggactcta accacgagtg acacactgtc ttaagtggct gtcgtgtgtc  180
atgtgctgtt tggcttgggg ataaagcaaa tcccatacaa accaaacaac tccagaaaac  240
cccaacaatt tcatgttTgtc aggaagctta ctttaaaaga ataagcttaa caaacactga  300
    
```


taaggctgac actctagatg catcttcaag gaaggcctct acggaaggca caagggagct 360
 ggggctggac tggctccctc tgggctttga ggccaagtgt cctgcacaga aggccctgca 420
 aaagcaaaga ccagggtggca gcagcaccct tgggctttca aaagtgcaag ggacaacgca 480
 tgggaccng aatggantgg gaaaaggatg gaatgcaaga ccngaaaggt tnccttcta 540
 aaactcn 547

<210> 8660

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8660

ctttggttgt ctacacagac acttaagtac tgtatcgctg ttatgcagcg gcctgtggag 60
 gcccctgggg gtggctgggc ctgtgtcctg agccctcagc cagatccagg ggggtcggtg 120
 tctggtcatg tccactccaa gagcagtagc accatgtaga aggctgtgag cagggtcccc 180
 tcggctgagt ggcagatgta ggctcactgc tctgcagccc cgaggggctg gccagctcag 240
 agtgcagaag agttcctctc catgggtcta gtcaccatc cgtctgacct ggacgtgtc 300
 atagctcatc cttgggcttc gattcactgc ctgagagaga ctcttgtgca ggttcggggg 360
 ggccctgctg ggcatccatg ggctgctcct gggagaggtc catctcttct gggctgaaga 420
 gcatcttcac caggtcatct gcctgcacc tgtcccgctc gctgtgtcga gggctccagg 480
 tgaaccacag ggcgatggca cancgcttgc ccctgggtgac agccttcatt catgnggggt 540
 ttcagtgcct gaan 554

<210> 8661

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8661

ggatattaat cccatgggtgc aaggatttcc tgcaaagtac ctttaatgtg tttaaatcag 60
 cagcaagcat taggacatgc tattttggcc ccataagtta ggtgtgtagc actacacatt 120
 agacaccaag tcatcccaac caatatttat ccatatgaac agataaactg aacaaaaaca 180
 tagttctgat aaaacctgca ttcacaacct aatgtagttt aaagtaaatt ttttcacaat 240
 tgagggctgc tatttaggac tgttttgtta ataataaaaa caggaattat atagaagata 300
 aaacaccatt ttttactgct atataatgtc ttgctatata aaacataccc tcaacaagtc 360
 aaaatattta aaaccagtgt ttcaaatacc aaaaatcaca gctatgttac tgttcagtaa 420
 ctccactcaa ataaatgtta gtactgcatt cttgaaggaa aaaaactgca gccaaaggcaa 480
 gaactctgaa gttttgcact cagagtttaa aagacagacc ctactntgca actgaanact 540
 gcccttttgt ttna 554

<210> 8662

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8662

agaaaaatct gtcaattctg tttccggtaa aatgtttact tcaaagaaat ttttatatag 60
 gctgaggcta atatatcca gagtataaac acttttcctt tggattacct aaaaacaaac 120
 ttttaaagta tcatatttca attgactaaa aatatagcca aatctgtcac aacacaacat 180
 aaagtaatgg acaattatag aatattttta attaacagta acaagccatc tacatcaaac 240
 cttatttcca actaaaacca aacaaaagca caacaatccc gtagtgtacc aagtgtgtat 300
 ttcaatttac tgtatgcaat ctaacaaaaa ttggtcata atttaccaga tatacataaa 360
 tgatttaagt agtaaaagaa aattcagctt caagagagta agttcatatc ttgaggaaaa 420
 gtaaaagtac attaagaatg taaagccaag tccagtttct atgcaataag tgaactgtag 480
 tctaataaag cagatttagg tgatttttag atatatatct tggctcttaa tatatattaa 540
 tatatagn 548

<210> 8663

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8663

```
acncagatgg ngtaatatat ttatataata aaagatgaaa atagtcactt tccataataa 60
aaataagttc ttttttttgn ttattttaca atatacttaa tattctcttc ttctttacct 120
tcctctccag cttcatttcc ttcattgctga atcaccaggg ggtcccacat ggctgtccca 180
actccatcaa gctggagtcc gagaggnggc aggagggcgg gcaggggctt aggaacacgc 240
gaggcagccg cactctaagn gtctctccac ctnttctaca aacgaggagc catccgngca 300
ctggaagacg tttttccgcc gcttgctgcg ggtgggctgg cagcactggg gcccacagcc 360
cccacgacat tccatgatgg gcaccttggg ggctgtggca catgatgcat aacctttctg 420
gcggcggatc acctctcgga ctacttgtcc caggcacgga ttctcttgnt ggcagtgtct 480
gcccgttaaa ccggctggca caaggcagta agggctcccc tgggctgana ngnggcn 537
```

<210> 8664

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8664

```
gttttttggg aattgtttta ttttaaaatt accttcccaa caaacatga aacacttggg 60
tgttacttta tggtttttca ttgaaaacat actacattgt aaatggtatt tcaaagtcag 120
acatagaatt gatcaaaatc taaggacaat attatgtaag gacaatatta aaaatggata 180
gaaaaagctt catttggtga ggttaatcta aaggatgcat aacctgtca cggtggacgg 240
ataaaaaagg tgataacctt gtgcttttat tcaactaagg tacttactaa aaccttaggt 300
tttatacagg tgtaagctc ccacctggaa aggacagtt ttctatatta cacctaaatt 360
tactttaaat aactgaagcc caaggaaaca gttgttttaa agaacttaac agtcagatag 420
ctacataatt tagtaaatta aaatcaacta agacaggtga taattggaat gtctcaaac 480
```

tatnccactg ggggaaaata cccctgtccc caatttggag gtggtnaagc cgaccctcag 540
gaggttgaac aatg 554

<210> 8665

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8665

catgttcccg tatgctttat tggaatgctg tcagggtccgc gccttccacc tgggcccctca 60
cacacagcaa ggagaggccc cagcaccggt cccaggccca cctgcccga cctgcagaag 120
ggaaaggcca tcaccctccg tggacggggt ctgggccacc acatccacct tctgaagggtg 180
gcccagacac ctccacgctg ctgactgcac ttcccatcaa aagggactcc ctggggcana 240
gtgggccgtc cccctacccc cgaggaaggc accctcctgg gcggggacag accttggctc 300
catgctgcca agtcaagggt ctggcgtgga aacaggcaca tgtggaacac cacatccac 360
tgtccaagggt ggagtccacc cctcctcgga gcactcagcc caccagggtc caagcagccc 420
tcgggagata ccacgcggcc gnccacgtnt caacttggaa aaaagacact tcaaagaccc 480
caagcttaag ttntcggggg ctggctttct tgggnccttt gggctggctg gttttcccgg 540
gggtttttaa aaacctn 557

<210> 8666

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8666

agcattatga atgaaattct ttggttttaa tticacacag tttaaatac aatatgaaat 60
caggctacag tatataaaaa actctccagc aaaatgatgt gccagcatca gctactaaaa 120
taaacaacaa aaaaactccg ccataagaat ttttttgcac ttttttttaa aaaaacatcg 180

acattacat cgctacatct ctaagctacc tcagttctga tttttaaaaa gcacctgctt 240
 ttcctttttt tcattcttgct tctaaatitt cagcttttaa aaaatataaa ttatatgaaa 300
 atacaagttg gaaaatagtc aaacacaata taacatctti ttcattcccta tactttctcag 360
 cttaaaaaaa aagtattctt aaaaaaaaaa gttcaataac tgaggcagta ttcctgataa 420
 ttttatttta atatatatat tttatatatg tatatgtatc atatatttat ggttccttgg 480
 aaacttcttt ggatgtaggt aagagttcaa caaatttatt tggaccccaa caggagtaag 540
 ccgatggcc caagat 556

<210> 8667

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8667

aaattaacca gatctgtctt ttaatagtta ccagaattta gatgttaatt cccagagga 60
 aaaatgtcca tggcacagtt tttctggaaa agttcacatg taggcagtga agcttctgaa 120
 gttaggcgtc aaattagtag tgacaatctt ttttttaatc ttgaaagtcc ctagttttta 180
 agaaagtaga atccatctgg ggcatgtctg catcacaggg tatcactcaa gagtcatcat 240
 caggccaaaa agactctgaa gggaaccagg agggtttggc ccttgctgtg gaaagatgct 300
 actgaaagta taagagaaca ccctaattgca cgcgtcaggc acgaaaccgt accatgcccc 360
 gctaagacat gggaccagag aacacgtcaa cgtcaggccg ctccaggaaa accatccaca 420
 aagacaacag aagctaaccg gaggtcgaca ctgccatgaa nagtgttggc tgaaacccgc 480
 agttaccagt gctttactgg acgcgaacat ncctaaggac ccgntgtgc tggttctaag 540
 catcctgacc cn 552

<210> 8668

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8668

attttagtat tccattagtt taattccatg tactttaatg ttccattagt aacatttaat	60
taagttttata aggaagaaag aacacgagag agagaacaaa tcccatttta tgaacaagcg	120
tgcgctagaa gcagggactg tcaaaggaga cactgaacag tgcagggagg attcatttcc	180
ccaccatata tctgggcaag caagtgtgga ggcagaagac atacagtaat gcaaaaaggca	240
tcattatcac agaattttct catgtgtgaa tgagaaagtc tttccatgga tataagtata	300
caataaatca cagtaatcta ataagcaaaa ctgctaagaa aaaggcaaat ttaaaaagaa	360
ataaaagttc aaaaaatttt taaagcttaa atatgtatgt aatgaatttt taaaaaattt	420
attngcttc tctgnttat aaaaagtttg gttcttgga aggaaacaaa ttggaattgt	480
acaggacttt atcttgnaaa tttaccatta aaggctttat cctaaggcan ttccttcaaa	540
aggtntctaa taaaggactt gaaant	566

<210> 8669

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8669

agaattccac tcaatcttta atcaagtagg gagaagtccc cacttaaaaa aaaaaaatat	60
ctgcagtttg aaggggcaaag ggaacagtta aaaaaagagg aaaactttat actcgccccct	120
ccccacaga gggttttccaa acctgttgta gcttgactaa aatgttcaga atgtatgatt	180
ttaaaggcag gtctctttat acaaagaaac tgctggcatt cttgactagt gaagaattat	240
ggcagaaagg ccattcttc tgagtctcaa acatgggtcca agaaagcata ttctgattgt	300
agcaactgac cagtcaatcc agagttccac ttacaaaacc cctgccctgt tggctttttg	360
tttccatttc cttccctgag aaaagggcaa tgtgtggtcc aagctggaga gctcaaaggc	420
ttaagtcttt cccctaaata tatgatatcc cctcctcctg ctccattgaa ttggcacttg	480
atgagcagaa gtcaagtgtg agaaggctga tctnggcag tcattcncaa gaganccctg	540
ggcttttttg ggg	553

<210> 8670

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8670

```
gcactaatgc tgcttttaat ggcggcgcaa tagagaagta caagggttta ctagcttgag 60
ctactagaag gtgtaaaagg tgcccgctga cactaccaag tagcctctta atagaaatgt 120
agaaaatata caggacaggg tggagatgag ctcttgaatt tagtaggggtg aaagagttaa 180
ctgccaaccc ggcaactatca ttgtacttgt ttggagaaaa tctgttttgt tctgggtgatg 240
atggttttat cttccctttt agttgggtgg gaagtaacag aaaatttgtt tccccaaaag 300
tttgacattt tcttgttaat acacgtttca tttcagtagc atgccaactg ttaagcctgc 360
aggaatcctc ctgggtatit ctgaattgtg ctgtgtgcat gtgtgtttga aagctcaaac 420
agcttgtctt cttacagcat cgagttgtit gctttattgt tagacacaat attagcagng 480
natectttcc gnattcccta ccatngaacc cnttnaganc taaaatc 527
```

<210> 8671

<211> 504

<212> DNA

<213> Homo sapiens

<400> 8671

```
caatattcaa ttattaactt taatgtgcaa ataaatagaa aaggaaaact acattcaaaa 60
cagctgcaaa ggaaggacaa gccccagAAC agaaattcct caagaacgga aaagaggcgc 120
tccctagaag catgcgggga tgggagtact gggaggaggg gctcggcggg gtctccggct 180
gcacccgggg cccaggtggc tctgcccag acggccgtgg gcctgttaca ggaatcttga 240
tggcaagttc ctttcttaga aaaccaggat gtgtacaaag tgcctgtgtg acacttgggg 300
agcgggggtg gggagcccag gaggacgggt cagcatcgga atcgcccagc ctggagtcaa 360
```

aggcatcagg agcctccagg ttccacagga aacttctaga aacacatctc actttctgga 420
 aactttgagt ccnactgttg cangatggca aggggtggcgg gtattttngg cctactggnn 480
 tcaaggggccc nggncaaggg cttt 504

<210> 8672

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8672

cattcaatgc attgtttatt gagtactaac tagctttggg cccaggctct gggttagcag 60
 catgcgtgaa acaatcagaa acaatcatga gcgcctgccc acatggggct tacagtctgg 120
 cagggaaga ctgtagacac agaaataaat atccgattat aagctgtgat tagaggcatg 180
 atggaaaaga gcaaggcttc ctgagagaaa caggggcgagc acaggaaaac ctctctgaga 240
 cagtacatg aacttgaaac ttgaagggtta aacaggagtg ggcaagacaa aaggggaaag 300
 aaggaatgtt ccaggcagag agaaagagaa aagaccagcag cacggtatag agccgaggac 360
 atctgaggaa gaaagggccg ccgggggttg ggccctctgg gtgactggga gaggaaggcg 420
 ccggaatgga tccagattaa atcggatgct gtgtgccctg tggaacatg gggtggtcct 480
 ttaacgcac ttgggttgta agccaaagga atgacctgn ttaanttgac ctttnaaag 539

<210> 8673

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8673

cttgagacat agccttcaact ctgtcgccca ggctggagtg cagtggggtg atctcggtc 60
 actgcaagct ctgcctcccg ggttcatgcc attctcctgt ctcagcctcc cgagtagctg 120
 ggactacagg cgcctgccac cagctctggc taattttttg tattttttta gtagcgacag 180

ggtttcaccg tgtagccag atggtcttga tctcctagcc ttgtgatcca cccgcctcgg 240
 cctcccaaag tgctgggatt accgcgcccc gccgaaagtg ttttaaactt ttgtatacat 300
 gtatttttgt gtaagaaagc actcaatcct aatgagtatg cccaacatg acttgtttgg 360
 ttataaaata taagtatgtt taaatttaat gtgaaaccct taagtaacaa catatataaa 420
 cattaactca aacagatgtc aaagctttgc aacactgagt tacacaaaag cctaantagg 480
 tagacaagga tgggnaggct nangtgggaa ggacacttga gttcanggan atcaanaac 539

<210> 8674

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8674

gaatcttaaa tcatcatctt tattttaagg ctaacattgc atataactaat taactgatga 60
 tgctgatcag atgatgtctg aatttttgag gctatatagt aaggnggtta gaagtgcagg 120
 ttctggcctc anactctttg gttcanatat cacctgtaca agttatgtga cattgggtcaa 180
 gtcgatgaac ctattttaaaa cctagtttct tcatctataa ttggggataa taacagtaac 240
 tatgtcataa agttgtatgt acatganatt gcctgtaaag tgagcaacaa tgcctgcaca 300
 tgataaatta taataattat tacatgttaa taattattat cttcataatc ttctaattgt 360
 ctgaatcata ttctcttata ttttgaaaaa cgataatgat aacccatgta aaacaaactc 420
 agataaccag aaaattcaat taaccaaaca cagtcttaag ctatacttca atgatgactg 480
 ctaacattct aagattctcc acatagtaga gactactntg ag 522

<210> 8675

<211> 351

<212> DNA

<213> Homo sapiens

<400> 8675

catcttctag gaatgttttt cttattttaa aaataatact gattttctgg gaaaaacaaa 60
 aaaacaagcc agagaanact gcccttcaaa ccaaaatggt aagaaaggca gctatgaaca 120
 tggggaanac aagtgtgaac atgaggaana cagggatgaa ggtgtgaaaa cagatgtgag 180
 gataagaaga caggtgtaaa ggtgagaaag aggccggnca tgggtggctca cgcctgtaat 240
 cccagcactg tgggaggcca aggcanatgg ntcantngan gtcaagagtt cgagaccagc 300
 ctgnccaaca tggcaaaacc ccgtnntac taaaaatata aaattagccg g 351

<210> 8676

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8676

gtcagtttac acatacatca tgttaatat agaccaaggc acaaaacggt tagtgcataa 60
 acccagtttc ttttaagatt tagcatttta ttttagtctc ttatcttagt ttggaccact 120
 tgtaccagct actctaccta ctacagacta ttttaacttac ccaacaaaat caaaagaggt 180
 tgctgaccag atttataggg gacataactg tttatattat caaagtgttt gcataaccaa 240
 aagtacaata ataaagatga aaatgcctcc tatttctttt agaaaataat acttaataag 300
 cttgctgcat ctttgatgtt ttactacta ctgcatgaca atgaatatct gatagaaaaa 360
 agaaatgtat acttgaatta tgatagccca tccatcacag tttaatctaa aaatgaaatt 420
 tctacagaaa caggaactat ttgacaaaag aaaaaaaaaa tccctcatcc aaacttcttt 480
 gtantggtaa aggctgcaaa ttgcagcgtt tagaaacctc cctttn 526

<210> 8677

<211> 528

<212> DNA

<213> Homo sapiens

<400> 8677

gaggaggata ctttcatttt tatatttatat cgtgaggtat tgtttggatt gttacaatga 60
 acttgcattt cttttgtaat gaagaaaata atacagagga aataacaaca actaaacctt 120
 tggcctggat tatcatcggc tggaaattca tgttggatgc aagtttttat tgataacaag 180
 ttattttttg gtttatatgc aaaaaatgtt cattgaatgc ctctatttg gctggcactg 240
 cctaggcact ttcacaggta tttcatccta atcctcacia cagccctatg aggtaatcat 300
 tgggtcccagt ttacagaagc ctgggtggg agattattgc ttgatatact tctatttgcc 360
 acacattttt gttggcaaga cgctcgatc ggctggatgc tctactgtca agagctctca 420
 ttggccagga gttcctattt gttgctgtaa gattcaaata atcaaaatac tagaattttt 480
 cccccaaga atgatgggac caatggcata agaagtaaan ggaaggaa 528

<210> 8678

<211> 522

<212> DNA

<213> Homo sapiens

<400> 8678

ctccatgttc atttttattt aaagactcag aaacacaggc atcatggttt gtcactactg 60
 acaagtcttc caaaatcaca cgctgacatt tgtgtctaac aaaaacactt gggatagggt 120
 gtgtgtgttt gtgtgtgtga actgtgcaa gtacaaagga tctcccagtc ggctgagcct 180
 gttttgaagt gcccggcctg gcatcaccac atgaggatgc caggagagca cccgtggccg 240
 ccactctctc tgcctccctc tgggcagagg cccctgggtg cctgcagtcc tgtcccctcg 300
 gtgtccactg acttcagcca tggctgtgga ctctaccatg ctctcaaag gaaatctctg 360
 tggcccccca aggccactac atggctaaga tgtgtacatc atggggccag gatgaaacat 420
 aagggttagt ttcattctta ccgccaaca tgtgtaccct ttgaggcaag atggcctgaa 480
 naaaggctaa ttctgtcct gctcttctct gcgagcttca tc 522

<210> 8679

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8679

```
ctctgttctt caacttcttg ctctgttngg gttcttgttn ggcctctaac ttccttttct 60
tgtcactttt caggctgatg atcgaggcgt tcggcccagc tttgttcaaa acttcattcc 120
actcttcate gtccccacgg attatgtatt canagaggtc catgctcttc agcttcccta 180
cttctttctt gggtttctcc tgaaattcct ttgctgcttc atctaggctg tcaactgaggg 240
tcttcacgn gggctccatg accacatcct tcgctgccac catctgctcc tcaatggcct 300
tttctgaac ttcattaaat agcttcacaa ctttgcgat gatccggttg aaaagtccca 360
tcaactggcc cgagggcagc tcaatctcct tttccagctg gtccacagac ttatgctgca 420
ggccaatccc caagagaaga agcccgactg agccgcaaac agggccaggg tccccanct 480
gggtcaggaa ataaaatgcc aaaaaagggc cgggaacatg tccat 525
```

<210> 8680

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8680

```
gatagtaggt tattttgctt tattgtggtt gtatatctgg atataaaact tttaaagctt 60
tcttgaataa aaatcattat tttgcagtcc ataatttact tgcccactga atgtctgaac 120
cagtgttctc tttttgtgtt tttctgctct attttatittt acaaattggca cataccatca 180
gagtaggcac agtctgacac tgcactcatt atgagagact tattcagaaa aaaagtgtaa 240
ggaataaaat attagcagtc aaatcctttg gttcatcttt tcaaaaaaga tcaaccgata 300
taattacaaa tcattgataa ttcatctttt tggttaaaaa caaatccacc aggtagatta 360
ctgattaaaa tgcaacactg ctttaaaaca ccacattcct attctcatca cactgttcaa 420
agatgccatt gtttacaact gattggacat gacacaggat acagtaaggc acaagtggac 480
ggtcaaataa aaacaaatac tttaggactt ggttttctgc ncaaattcta aaatatg 537
```

<210> 8681

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8681

```

aagtgagaca ctcaagttgt cgctgcattt taataaacat agcacacaat gtgttgctac   60
acaaacacca ttcataaacc tgagtcacag gtttcagatg ggagctgggg acgtgtataa  120
atagcctgtg tatgttaaac agtagaaaag aaaagaagtt tggggaataa ggtcaaaatc  180
atcgtgcccc atttaaacad cataaaaatc tcagccttgt cattatttac aacccccagc  240
ataactcccc cccaaaagag aatgccaaac ggaaaattct aaataagatg atgtcctcac  300
gtcgacctaa acagtacaaa tgatgcagca tcataaaaca aagttataat tatgttgtct  360
catttcctgg ctgccggatg cccacggtac agagcagcca ctccacagga ttttctgagc  420
tctgagctgt ctggggtttt tgtaagaaca tagctttgac tagcattgac caattgattg  480
catttaaaga ctctgtgatg gtttgagggt gcaaaagaag aattccactt   530

```

<210> 8682

<211> 534

<212> DNA

<213> Homo sapiens

<400> 8682

```

ctaaatcaag tccattttat ttgaaatttt ccacatgcca cacatgtaca tgaaaattcc   60
catccagaat gtagtttgct acagtgaaca ccaatgtcag gagcaggcat caccgtgaga  120
cgccacgggg gcaggtcagc gggacgggga caggaggtt ggtcatcgaa aggcaggtga  180
tgcatgtcgg gtcatttagc acctggtcat gagatacggc gagacccccca ggtccaggga  240
aaggtctccc cttaaaacca cgtggagctc tgctgtctct gggcagcttc acgtggacag  300
gcaatgctca gaaggtggcg aaggggctgg agggagatac caccgacggg ctgaggggga  360
ggggcacgca cacacacagg cacgcacatg cttgccccatg aacaccccc gggcacacac  420

```

acacccttgc acactcccca cctccctcc accccagaca catcagcaca agcggtccan 480
gcttctggct tnactccccg ggaggcttnt gtggccaggg gttcccatgg cggg 534

<210> 8683

<211> 504

<212> DNA

<213> Homo sapiens

<400> 8683

ganacggaat ttcgctcttg ttgcccgggc tggaatgcaa nggcacaatc tcagctcact 60
gcagcgtctg cttcccagg tcaagcaatt ctctgtctc agcctcctga gtagctggga 120
ttacaggcac atgccaccac acctggctaa tttttgtatt tttagtanaa tcgaggtttc 180
atcatgttgg tcaggctggc ctcaaactcc tgacttcagg ngatccgccc gcctcggcct 240
cccaaagngc tgggattaca ggngtgagcc accatgcccc gcctaanaaa tacttttaag 300
tatattttca ttagctagaa ttgccaatc tgnntaggt taaattactt ggtataggga 360
gagagaaagc ctatcttacc tgtngctttc ttacttggng gtaacatcca gcagttagtc 420
tatttataaa cataattact tttcacata tgaaccataa aatatttaac tttctgggtct 480
atatggttgg ctaccgctgg atcn 504

<210> 8684

<211> 520

<212> DNA

<213> Homo sapiens

<400> 8684

atctatttct ttttgcctt tatctggaga gattccctca actttatttt ccagactgta 60
taccaaatac ttttagcagt cttattttat tttcaaagag atcttcttat tctcagctct 120
ctctttcttt tcttgccttt taagagacag ggtctcactc tgtccccag gctggagtgc 180
agtggcacca tcatggctca ctgaagcctt gaactcctgg gctcaagtga tcttcccact 240

tcagcctccc aagtagctag gaccacaggc acatgccacc atgcttggct aattttttaa 300
aattatatttg tagagacggg atgttgccat cttgcctagg ctggtcttga actcctgagt 360
tttccgtttc tttgtagtat cctgtttttc atcttaaata cacctcaaat ctctctggag 420
atggaattaa aattaagtta ttctttccac attggctttg tttccctcag agtttgncat 480
attttcaagg cccctaattc tacctcgggg actttcttat 520

<210> 8685

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8685

ataatttcaa aggatacttt ttattctgct ttagtttaag gtgacaagaa gctattttaag 60
tgattacatt tgaccaaattg tagcactaat agccattgta atcttctccg ccaacaaaat 120
aagacaattt agaaacattg ttttacttgt cttcacactt tggaggtaga aatcatgaaa 180
cattaatctc atgattacca taattatgct ctcaaacagc ccaagtgaag gaacaatcat 240
tctcacaaaa tgggtgccata atggtttaaag cttaatgtct tgctaattgat caagatgtat 300
acacaacata aaataaatag aattgcttgt tgtctgctga agttcttggc aatgctaagg 360
taagttatca ttttactctt tccagttctc aatagccagc cctcaaagag caaggggtgg 420
taggacaaca ggaatgagtg gaaatggctt ctctggcgga tccctcctaa ctgcagtcac 480
tcagtctagc aggctcaact tncactgggt cttctggtgg accttg 526

<210> 8686

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8686

agagatttaa cttttgctct gattttccaa ttataaggtc aaacattatt ctagngttt 60

ctgtgagggt gttttatatg anattgacat ttaaataaat cagtgaactc tgagtaatgc 120
 anactgtcct cctcgatgtt agtgggcttg atccagtcag gtgaaggctt gaagagaaaa 180
 aaagaccgtc ctcttcccag aacaagagaa tctccaaca gatacctttg gactggacct 240
 tgcacatca gctttcctgg gtttccagcc tctgcctca cactccagct tttggacttg 300
 ttagacttaa taataacaac acaagccaat ccttttaagg aagtttgtct ggagaatctt 360
 gacaaacaca aacatctact gagagttcct gtccaagttt tgctcacacc ctagcaagag 420
 gcttctggct taccagttgg gagtgtgagg ttctttgctt gtaagacctg atccaccagc 480
 ggtacaccag ctnttgccc agggcaagaa cang 514

<210> 8687

<211> 512

<212> DNA

<213> Homo sapiens

<400> 8687

agcagtgcaa aaattttatt tctgnttccc ctccccacca ctttacaaga tgtaaaattt 60
 tacttaatcc accgtattct ctttttttaa ttatctgtta tcagtcattgt caaatgtgag 120
 gaaaaaaaca ctaatcaatt aaaaatatcc gtccctcttc cccactgcta cagcaaattt 180
 aggataaatc tacagcattc acttacttta gctggttctg atactgagga atactttttt 240
 atttgagaat caacaccta agacttggct aattgtacag catttgaatc atcactgata 300
 agtgttccaa gagccacaag aagtctaaaa gtggcttcta ggtcttgnac tacttccaag 360
 attnggctaa ttagtgacaa acattgggct ttcccttcaa tgttatggctc tttatgaaaa 420
 caaacagaat agttcagggc caatgtagcc agagcaatgn gaatgntctt attgctccct 480
 gatttcagtt ctattgcatg ggacatcagt ga 512

<210> 8688

<211> 480

<212> DNA

<213> Homo sapiens

<400> 8688

```

aacaggacac ttaatttgct aaactttatt ttatacatat acgtttacat ttactagtca 60
tggtgtcaac ttgttaacac aacgaagccc taatggaccc gttttgaaat tagaagctgg 120
acagttacag gcttttggtct cttcaagaat ccaattcacc cctgggtttc gcttggcaca 180
caccccagga gaacgtcgat gcacacagct gtgtagctgc aaacggaaac cactctcttt 240
tctctcgtat ttttcagtca gactcactca ggattttgaa atgaatcatc acgagaaatt 300
tgttttaaag ttgaatcact gagaacatct aacaactgtt cacattcttt atcacaaaaa 360
ctgaagtcgg aaaagacgcc ctgaaaactt gcaagggcta atactctatg atagaatatt 420
actactgttc accatgntaa nacatttact tactaccata cncctgaaca gncncggnan 480

```

<210> 8689

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8689

```

cctcttttaa aaactctatt tggtgcgtgc ccacggtgct gcgtcccgtc agacataacct 60
gtatagatct ctctatttat atatatatat atataaaagg ttcttttagca gttaaataga 120
ttccaatatg aacgtctccc aggacaaagc tgcgtctcgc ctctgggtca cacgcactctg 180
tgcggctggg gtgtatgtgc cgcgtcacag cagtaccata taaatacgtt gatttgaacg 240
cagtttccct gtggnggtaa aaacacattc ctgacaagtg acaagcagaa gagtccggca 300
gctgcagcgc ctactcggc tgggacctcg tacttgaaga tgacgtgaa gagccggccg 360
ccagcccgtc cggccagcca cgcgttcttg atgacggcca gcttggaggt tttcgaacgc 420
aaggctngct gggaanttgg ggtganagga acgggccatg gccttnatga ccnccaaatc 480
cggccaagnt tccggacaat gn 502

```

<210> 8690

<211> 468

<212> DNA

<213> Homo sapiens

<400> 8690

```

gatagccaaa agcaatttat tatagtttag cctcaaaaaa ataaaaataa aaaaattatc 60
cagnggttat gaggagtcta ggaaaacctg tcccagtaat gccaacttgg aggtgaaggg 120
ctgactgggg cagctganaa gtgggacctt ctgtttggca ggcttctctt cccttgcctg 180
gtcatggttt tctggtgaga agagtgttcc tggccttgct ggaggttccc atggccccga 240
actaacagtg tttttctgaa atttcgacct gcaccgtttg agagagtaga attccctcat 300
caagtccctc acctcccact gctcttctt cagcctctgg cagcagtga gggcggcagg 360
gtcgatgggg tgagcttctg tgttgaagat gtacccccca gccccagga tgcactcccc 420
atagggggtg atcaccngt cnaaggtgga ccnnttggtg nggannaa 468

```

<210> 8691

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8691

```

aattgctaag aattttatgt agcaagtttg tttattcagt aacataatca caaaatagaa 60
atatcacatt cacagaagtg gaaataaaga gcataaaata tttttaaac aggaaagcaa 120
tgggatcact ttcaagagcc tcaaagaaaa cttttaattt acaatgctac gctttcatga 180
ttaataggat taatgtgtgg tttttcttg ataaaagtag tcatgatttt ttagtattac 240
atacattcat tgcatatgac agacactctg ataaaaatgt actgttctaa ttacttaatt 300
gttttggtc atttaacacc ttgtttaaat agctttaaga catataagag gcaaataatt 360
atatatactt aaggataaaa ttttcagata tttatccaaa cacacattta cccattaaat 420
tagaacacca actgcttaat atgtaaaact agtttgaaat catgactctt gattaaatac 480
atacttcaac atctctcatg agacttccca acttcaaaaa tga 523

```

<210> 8692

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8692

```

aagttttcat ggttttaaca ttattgtaa gtcctagatg aaacatactg aaaagattat   60
ttttgcttta atcctaatat gctaagaaaa gttcattggc acaaatatcc agaggtat   120
tacagtttca ttacctttg gtggcaaaga gtattttgct aaccgtatgg atacagtcag   180
atagtttcca atgcacagct ttatgctaaa gagaattcaa atgtgtctct ttttttgct   240
aaaaaagga tgtaaaaagt ccaatatgaa acagaacgag tgcaacacga aatacaaaat   300
atgcctatca tgtaggcttt tgaacagtta atagctctac gtgttatcta taaacatttt   360
ttactagtaa catcactatt gtataaatat taaaaacaaa aatgacatta aaaaaatagc   420
atatgaactt tacaaaaatg gctactttna gntttcctaa ctaaaatcgg aattcaaatn   480
cncaancaa tttncctacc taatcaaacc cnccaccgg accggttttt   530

```

<210> 8693

<211> 498

<212> DNA

<213> Homo sapiens

<400> 8693

```

aacagaaaaa agtcaaata caattttaat agacttttaa acagtgtaca agtaaaaaac   60
actggttttg tttttcaaaa gttgaaggaa gatatccagt cattaaacag tctacaaaac   120
atatgccagt aaattacata aaagactatg tacaatataa aaagagctga aaacagtctt   180
cactgtaaaa ataattttaa acaaaacttt caattttaaa tatcatctat agcacacaaa   240
catcatgcaa atggaaaact aaatatactg cattcttttag ttagccaaa taaattcaga   300
ttgagacatc ttataagtag ggaaatggcc attcaatacg atttttttct ctggcagtaa   360
tggtcctagc tgggtgtttt atgcataaag aacagctata tttcaaacc tttttattgt   420

```

aataaatact aaagcaacag aggaatactt tattaattta ggagtgatgt tcaaaaatgg 480
nctgaaaaat aaangctn 498

<210> 8694

<211> 518

<212> DNA

<213> Homo sapiens

<400> 8694

caaataccat actataccca attttagtca atttgtaaata tataaattat attattttgtg 60
ctacagtttg tgacatttaa atcttattag aagataagca ccaaacctat taaaataaaa 120
aatagataaa atgctgtggt tttcccagca gcaggatatt gtgtacgtcc tgtaggctgt 180
aaacttatgc tcccttctcc tgaaacaatg tttttgataa acttgccctt ctccttgaa 240
acttttctg aaaacagact ttgtctttaa ctgtagtctt ggaaaatgta caaaagagca 300
aaactgcccc tctcggcggg acggccgcat gttacagaaa ggcttcgtct ctgctgctga 360
tgccaccacg agccctgccc agcgtcacc aggagggcgg gctgcggccc ccggggctct 420
ggggagggtc tcaactcagag ggtaaaaagc tccacagaag agtcacccca gagcacctgt 480
cggagaccct gcgtcccttc cctnangggg ctgnnaan 518

<210> 8695

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8695

cctcttggtt atttggttgg tccagctaga tatcggaagc cactcgaact tttcgggaaa 60
gtatttgga atttcaatct tctccacggg aagacgatag aaatcggcaa ctctctgcct 120
cagggagccg gcagtcacc cctgggccgc gttccacacc aggtccaggg caggggcata 180
gtcctctca ccagggatgc gcacctgtgt cctcagcagc acgtcctggg ggcccaagtt 240

ttcgcctttc tgaaggggct ctaagcagat ctcaattctc cgtcctagtt tatattccct 300
 gaggtagctgc cggtagcttc gtaaaagcct gcctgggagc ttcctctcca ccgtccaggc 360
 tctgaggtgg gctggggacg ggacaccgaa ctccaggaaa ggaggcaagg tcatggcctg 420
 agacttcagc tccgccagcg tggcatcttc tgagatctct atgtctccca agtagaggag 480
 agaaacttgc gcaggcttcg ttcccagaag caccttggct ggaagtggct n 531

<210> 8696

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8696

gatataggag atttggcttg tattgtgcaa ggcttgacat aatgggacta ctaggcttgg 60
 ggattctttc atgagaattt cactaagaaa acaatagttt tagtctcaat cccttcatag 120
 ttggaagcat aatgttccctg aaccctccac tcccagatat agacaaatat ttcttcttcc 180
 aaagcagtaa agaggtctag atgagctgct ggccatttag gggtgaggga ggcatttgag 240
 ggcaactgggc ctggtcaagg agtaataggg gtattcccag gagctactaa aggctggctg 300
 ctgagctcct gaacaggggt gactgggtggg gatccctcag ggccgagacc aggtggcgaa 360
 cccgccgctg ctgttgcagc caatagagca tctccacttt gtcactcttc atcttgtcca 420
 ggtagggccg ccccttgaaa gaatcactgg cttcgcccga agattaactc tatctcctta 480
 nganggggaac ccaagaagac tcnnttaagt tgaactttct gnngaaaagg ctttcg 536

<210> 8697

<211> 507

<212> DNA

<213> Homo sapiens

<400> 8697

cgaagttngt tagccatgac atgggcttct ttatcagctt tgggaggcct ttttgtctcc 60

tgctttttct ttaggaaagn gctcacactt tcagctgcgt tttctacagc tcctaacttg 120
aataaaaaaa atagngcagg taacttctcc attttcctta gtttttcaac tanaagngga 180
aacatggnga tcatgttttc tggactcaaa tctgcttcag gactaanatt ctgaagtncc 240
attctggcct gctctacgtt gccatittta atccaactng ttaattctgc ctttanactc 300
tcttcatatt tcctagcatc catcttttta atgactaatt tatngttaaa atgaatgaag 360
ttttctgggc ncagttcctg ggcccagggc caacttttcc aaatttgaaa catggcatca 420
tacagctgga tgctttctcg aggtgaaagg gtaagatcag gaggggaatc catacctttc 480
aatatgatcc gttggtagtg cagcnca 507

<210> 8698

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8698

aaaaaaacaa agcaaaccct gggatcaact ttattgctga tggctgaagc ctctcctcc 60
ctatcccctt ggtctttcag gnggtccaaa gcccctccag gatagcacag tgcttaggct 120
ctgctgggcc agaggcaagg gagacaatct atctcccag cctgccctgg ccagtcctt 180
tcctgcccc taccacccc tattgcacat caaatcatgt aaacatggct atggggatgg 240
cccanaacag cagtgaggca gattgatgtg taaacagatt tgggatcagg ggctagaccc 300
agtcaccag ccctaccca tgctgaggcc acagttaagt atggaaaagc aggaggtcct 360
gttcccaaac tctggctcan attatgcaat agtgcanatg gctctgctcc cctctgccac 420
ccaccctctc agattccagg tcctgaggtc caagtagcct tgggcttccc tccaggccta 480
ggcagcagat ggcagtgtcc agttttttcc ttc 513

<210> 8699

<211> 434

<212> DNA

<213> Homo sapiens

<400> 8699

```

agtttttttc tctttatttc ttatggataa aatgcgacat acatattcta cttacaatg   60
aaagctgatg ggacagaaga atcaatatta gcttttgaga tgggcaaaga cataaaacat  120
tggcgttttc tagtgtcatg atttgtcaaa ttagtttttag aaaatggtaa atgtctgaca  180
gaaaaaaaaat ttttaattaa ggtgtatgta agtgtgtaaa actgttaaaa atgcttgaaa  240
acaaacattt taatcccatg acatattatt tttatttgtg gaaaacagct aaaaactgcc  300
tgtcagagaa actatttaac cctttaacat aaagtctttt aaggcacata aacatttatg  360
aagaacagtt gaaatatgct cgctaggaag aaggnnccatt ttaactcata tgagcattca  420
gtcaagngaa nncn                                     434

```

<210> 8700

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8700

```

aaagtttatt catgaatggt ttaatttccc tttaaagcta gaaaataaag atcatttacc   60
ttctgatctt cgtttttcca aatggtaata agcattgatc cttccctcta ataaagggtga  120
aatttttaaa atctcagtga ataggaatgt gcaaagctct aagaaaacta ttacttgaat  180
gtctctaaag tggtagaaga tcacaagttg ggaataccct caaaaactat atttttacct  240
tactgttaaa acttgttttc aaagtgggtg aatctgaaag atcacagttc aaaagtaatt  300
cccataccia ataatatcaa ctttaggtga acatctaagt atttaagagt attatttttc  360
ttggctgggt gcggcagctc acacctgtaa tcccagcact ttgggaggcc gaggcaggcg  420
gattcaggag tttgagccca gcctgaccia catggtgaaa ccttgnctct actaaaaata  480
caaaaattac cggggcttgt tggtcacac ctgtaatccc agcttctcag gcggctgacc  540
ntgagaatcc tttgaacca ggaggcggaa ntgcatgagg ggaa                               584

```

<210> 8701

<211> 588

<212> DNA

<213> Homo sapiens

<400> 8701

```

gctgagaaaa ggcaatgtat attatagttc tgtggtagta ctgataacat tcaagtcatt   60
cttaggcacc agtcttacgt atatgaagtc actttttcat tccattgtac aaaactcata  120
ttttgagaaa aatctaatag ctaatagtct ccaacaccat atgatcataa tccttttagct  180
taagtagaga tctacttatt aaatgaggca ccatcaacct aaggaaagat aagctgtaag  240
agaatgaaga cagaggtata tcaagtaaca agaacattct tccttatcag gataaaatgt  300
ttatcagtat tcaaataaaa tatcttaaat ggaaagagac aggaaagaac atggttaaata  360
cacagaaaat gaagaaaggg agaagctgat catgatcttg tgcaacatta tgacagcact  420
aaggnattac cgtatccaat acaaggatac ttaatagacc naagaattta aaatcccagg  480
gaactggaat accagcccca aagaagcccc tctttgtggg ggtcacaccc caaanggcatt  540
caccaatttg gaaattttta atttagagac nncnggtttt tnttggng                    588

```

<210> 8702

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8702

```

gcaaccatag tgtgaacgtt cagcattgca tactgaaaaa ctttgaatct catgtaagaa   60
ggaactgggc tagagacagg agccaagatt tattaccatt tctaagtttt atgagttcta  120
ttgttttcct acctttatta ccagcgtag ctgtaatgag gattctagaa aaaagagctg  180
gaaaaaagaa gcatccccca actcccacaa tgtagcactt cagttctggc ctcttttagga  240
ttggggcagt gtctcatctc tttattgtgt attcgtagac agtaagaggg agtctcactt  300
actacttgga aaagtittta agacctaata cttttgtgtg tgtgtgggaa ctaggccaca  360
aaagtgcttt atgaaagagt ttccttacga tcatgtccgg attcaaattt caagtagttt  420

```


gcatgatctt catgtaatat ctgggacaca ccttcataat tgacaagcct tttttttata 480
 taataataag aatggctaaa tggagtgagg gatatcattc attccgcccc atgaccttat 540
 cttttcaggn gggaaatcaa tggcnaaagg aaatggtctt tccaggn 587

<210> 8703

<211> 578

<212> DNA

<213> Homo sapiens

<400> 8703

aagcttctca aaacactttt taattctcca tttttcccat caagaccaa gttgtacaaa 60
 caggtacaaa atccccacc ttcagggtgt gaggcacac tgtgtgtggt caaagtccca 120
 tctcctcccc tttccctttc cacgagtttt caagatgtgg ccagtcagt gcattgctgc 180
 cttctatgac ctatgaacca tgggcagcaa gaggactggt gaccggggga catggtgagg 240
 tccagtgtgc caggaacatg gtaagtgcc acattgcggg ggaggggaaca attcagagac 300
 aggctcagct ggaggccgca cagaggagaa atgtcactct gtcccatctt ccttgcattc 360
 agctgagctc agaccaagtg agcacctaag aatcatttac ccccaaagga tgtttcaagt 420
 gagatgcaat gntctctaac cattattctc ttāgaaatta aggggtggcgg ggcnggaatc 480
 aaacnnatgt ttgaaatggc tttattcctc ctagtggcta atgctggtct tgggtttatt 540
 tgcngaaata aacccaaatg gnantaaacc accntcan 578

<210> 8704

<211> 505

<212> DNA

<213> Homo sapiens

<400> 8704

gcttcaggcg cttttattag gttccactgc agggctgggg tcaatgtaat gcaaattcaa 60
 gcccagtgat gcacacctgt gagccgaaac agagccgaag caggagcacc tgtgtcccag 120

gagcagctgg ttggagggag ccagggccag gccccacctc ctctcgggac caggagactg 180
gcagccgctg tgttcacctg ggcaggtgtg caccagtgca cccccactgg attatggtgc 240
tggtagcatg agaggggtgtg tccacaccaa gggcaggtga agatgcgagg tggggctgag 300
acctccttcc cacaagagga ggtggctgag cctcccaggg cctgaactct cacagcaggg 360
ctcaccccca agcctgtatg cttagctctg actctctttg gacaataaaa taaagtgcac 420
tactgaacaa agagtaactc aaaaccagaa tcagacaaat cgccangntt ttccttagct 480
naangacnaa ngaaacntga atgat 505

<210> 8705

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8705

gggggaggca ggccatttat tgaagaactg cttgcagaca tggacacaca cagccatggt 60
aaccagacgc caccctgggg ccagggagca cccagaaaca gccctgggct gccagcccag 120
gcctggacat ttgcccacca cgggtggagg gcctctcttg gcatcaacca tccacgacct 180
cctacggcac catctctcct gccaaagtgc ccatgggggt ctccaggaag aaaaccagcc 240
ttgggggatt ccaaggccca gggagggtgg gaagctgccc acgccctcag gctgtgcca 300
gtctcatgct caccatttct ttctatggcc aaagggaagt cgctggacga gggaggtccc 360
tctgctggga tgagcagcac agcacggctg gggccccagg tcacagaaat ggggtgcaggg 420
atcctgggac ctgggctgga tgggcacccg ctttgggatt tcctctggtt aacctgtgta 480
tgggtccaagg aacantgtag gaangggctt ggcattgggt ggggcttgca tgtccgggct 540
ttttcgtaac ccaaccaana tcttcnggag gaacagagga gang 584

<210> 8706

<211> 529

<212> DNA

<213> Homo sapiens

<400> 8706

```

ggtttcctct gtcactttta attaagacac aagttgagta agcagcctcc acaggctgta 60
ttcccaggcc cccgcccacc ctgacctttg gcccagaagc tactgcttca gtgtgtgggg 120
tggaggagtg agactgggtc cacagtgaca ttattgctga cctcttctgt gtgaggaaaa 180
aggccacgag acccttttggt gggccagccc tgagtgtctc tctcccaagt ttttaaggcag 240
ggagggggaa ataactgtac agccctttta gccccagct ctggagtggc agacagcaat 300
gaggccacat ccctggagct gcccggggga agtgggtgag gaaccaaagc cgtgggtccct 360
gtagagcaac tgtggggagg ggagggccag tcccctgctc agtcctgacc acataagcct 420
tggtcacagg tgtaggtgga nagggcactg gcggacactg ncctaagggtg catcctgagg 480
catttaggng ggccccatt taggcatgc ttttnattgg ccttgaccn 529

```

<210> 8707

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8707

```

atgtaaaaaa gaattgtatt cttttacata gatcaacaca aaacagtaca ttgcctttgt 60
atgttaaagt ctcattatgc tgagtgacaa ttctaagagc aaagacatgt agttatctaa 120
attttatggg tcctcaatta ctgcagatag acagtacagt aagagacagt acagtaagaa 180
ataaaaaggc tgaaaggaat gttttggaca ttataggagg cctaactttg ggtgggtgtag 240
atacagatca aaatgaattc tcaaaccaga gatgggcttt gtggaatggg cctaaagtag 300
tgacaaggta gtcacagact tctggaggag ggtacttggg ctggtgtcta cctggcatat 360
ttaggaacat tccataacga gatgtaatat cagcacaatt gattatttag cccaaggctct 420
cagtcagttg atggctacaa gtgttaagta ccacaagccc cacctctatc tctgtatggt 480
tagagtgcaa atattttccc catgcttctc gtcccctant cactgccacc ccccttcggc 540
cttcctatt cttacaggac ttaacagctg gcacctanaa ct 582

```

<210> 8708

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8708

```
ccttcatttt gtttttatta tagcatgttt gcttaattta cagcaagcag aaaataagct 60
gggtcttggt ttgatccaaa cattgatgtt ttaaagggtg tacacaatat ttgttaaaaa 120
gaacatataa aaataccttt ttagaagcct ctataagaaa gaaaatacaa agtttaaccc 180
cacaactttc ctctttgcta gaactgtaaa ctactgctac agttttaaat agactttttg 240
ttgtttaaac tatacatcca ggaaaatcta aaaaaattaa agaaacgtgc atataaacga 300
ttgcatagca gaacatgaac attaactgca aacagtaaag aaatgaaagt tagaaatact 360
atcaaataa caaaggttct agaatcaatc ctttaaacac attccacaaa cagtatttaa 420
aatccatcgt tgtattcttt acaggcaaag cctagattac taaaaccgaa attgaaaaaa 480
gtaatcctct aaaagggaat cgtttgccat aattcttact tgnatctgta agcagcaatc 540
tgagatttta aaaganctac tttttattct gaaangaaat ggac 584
```

<210> 8709

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8709

```
gagatggagt ttcgctcttg ctgcccaagc tggagtgcaa tggcgcaatc tcagctcact 60
gcaacctctg cctcccaggt tcaagcgatt ctctgcctc agcctcccaa gcagctggga 120
ttacaggcgc ccgccaccac gcctggctaa ttttgtattt ttagtagaga tggggtttct 180
ccatgttggt caggctggtc ttgaactccc aacctcaggt gatcctcctg cttcagcctc 240
ccaaagtgtt gggattacaa gcgtgggcca ccacgccaag cggtgaatgc ccatttagtt 300
gtattcataa ttcccgtgcc atgtgttcga attgaattag caatatgccg aatattaata 360
```

gtattcaaat gcttggttatt gcttggtcgt tcaataaaaa tctgattggt gagattatag 420
 aggtatcggg acacaaatat atgaatgttt ctcataatit ctaaaacatc aaggccctgt 480
 tccaaagtct gactgggaag atgtgcctct gcataaccag ccataacgct gagcagctta 540
 agttctcatc tcactataag tggncaccg 569

<210> 8710

<211> 557

<212> DNA

<213> Homo sapiens

<400> 8710

gaggagcaaa cgcggctcat ttattagaat atgcaaaaga gaggactttc ctccacaaat 60
 acagattgct gcttctcagt ttctatcaag agcaagacaa cagttgaaaa ctgtattcct 120
 gagaagaagc aaaaaagtta tcagtttaca aacaaggata acaggtgatt tcaacaaaag 180
 ataagaaact tttttttcca agaatacaaaa tttcaagtat tattccanat gacatggcaa 240
 agctagcaca ggcggaagcc aaggngcccc tcaggctctg tagggtcttg gaggaagggc 300
 ccgggcagca tgaggagagcg gcgcgtcctg ggacctgcct ccagccctgg gcttggggcc 360
 gtggtcactc acacaaggga gcagcacgtc ctgggacctg cgtccagccc caggctcggg 420
 gcccgcggtc actcacacaa gggagcacat gtcctgggac ctgcgtccag cccagcttn 480
 gggccggggc acttaccggt aacaaggacg ataacttgnn ggccccttga gggtacaagt 540
 tttggncttg gaaggtt 557

<210> 8711

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8711

cagagaatgg cactttattt ttaagacttg atttttttgc catgattatc taccaattct 60

tccatgatgg tgtcatcctc ttcaacagtg accaggacct tcttgcccac tagattaaag 120
 atgtcttcag gaggatagcc tttgggctca cccaccttca cggtgagcat gtccattggt 180
 agaatggtgc cticcggaaat tttcactttg gccaccacag acttgcccag cttctcattg 240
 caggccatct cacagggcag cagctgcttg gttggggagc ccagggcacg ctccacaaga 300
 cgcactgacc gcaccagctc ggccagttct ccaggctcca gcgaggccga gtgggtcactc 360
 cccctccagg tcttgtccaa agttatgtga cgttccaaca ccttgggtccc cagagccact 420
 gcggccacag atatcgctat gcctgtttca tgcccagaat accctatggg aatgtcagga 480
 aagagcttct gatnttcna nannaccnc ang 514

<210> 8712

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8712

agggtctgcg aagtttttaa tgttcaaggg gctgtccgtt ttgaaagtg aaaaggaatt 60
 aacatattta ggtccactca tagggaggag gaaaaagaaa ttctggcata gcacaggggt 120
 caggaaacta tggcccacca cctgtcgttg tcagtagttt ccctggagcc cagccatgca 180
 aatggttgac atgctgccga tggccgctct gcagaatcgc tgggactaag accacaggtc 240
 cagaaagctt caaatggtta ctatcgggcc ctccacagaa gtctgcccac tctccataca 300
 gcatatgatg aaatacactg cattatactg aatattgaaa aaaaatatac tgcagctact 360
 gaaaaataaa cacaaagtgt atatacaaac agggaaagat gttcaagaaa tcatgaagaa 420
 agttttatatt taaactctgc ctggcttctg agggccacaa ggtcccgtca attnggttcc 480
 tanggttcca tggagaaagg aattgaagtc tttggnaaaa ttganccttg ggangggtaa 540
 cnaggacttt gggcacantg gttaacgggg tcccaccgg n 581

<210> 8713

<211> 440

<212> DNA

<213> Homo sapiens

<400> 8713

```
acagctgggc caccgggggt gacatcacgt attggtaggt ccatgatgcc cccctgagcc 60
acaaaaccag caagttttta ttagggattt taaaagggga ggggtgtatg aacagggagt 120
aggtcacaaa gatcacatgc ttcaaagggc anaaggcaga gcaaagatga catgcttctg 180
aagaaacagg accagagcaa aatcagaaac tcctgataag ggtctatgtt cagcgggtgca 240
tgtattgnct tgataaacat cttaacagaa aacagggttc agagcaaaga accggcctga 300
cctcaaattt accaggactg gggtttccca atcctagtaa gcctgagggt actgcaggag 360
accagggcgt atctcagtcc ttatctnaac cacatnggac agacactncc anagnggncg 420
tttatanacc tccccagga 440
```

<210> 8714

<211> 440

<212> DNA

<213> Homo sapiens

<400> 8714

```
ccatgaaaaa gattccactt tatTTtattt attattgtta ttgttatttt tacaacaat 60
anatttgctg caacatgctc tggctcatat tattgaatna aaaaatttaa cacatttcaa 120
aaatatcaaa aatacactat aatgagtctt aagactacaa tacgacaatg attgcacaaa 180
accgtaagat atgagcccac tgtctggatg acatccattg gcaacagtga gagaaaaccc 240
tatagcatct gggagaagtg catgaaattt agaatncaag gaacttatgt gtgactgact 300
gatcaccaaa tgaggcaaac agagcaggat tgactgtagc tgctttttct caatctagga 360
agngcttacc ccaactatgg ggcaaangtc actaactgga aanattaact tgccttnatg 420
atngggagtc gnaangcctc 440
```

<210> 8715

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8715

```

ataataaaga atatggtaat ttaaatgaca aaaattgtat tngaaatag cgcactctat   60
actgagatga atgaggggaa aaaagtcaaa actcctttca aaactatatt caaagcatca  120
gaaaaaattt ttttttcttt ttacaaagtt atgtataagt catagggacc accaaatact  180
gaaatatgaa gactctatga ccaaagttca aaactgattt taaggaactg tgtgaagcaa  240
gacaggaaaa tttgtattta acactctata gaacttcaca gtaaagctgg aatttagaga  300
ctaattggctt aacaggagta ctgccaacaa ggcctttcct ttctcagaat catctcctaa  360
tattcgtata ccattgacaa gttgtaacag cagacttaga ctttngttt tcttaagatg  420
gggcttaata aggtgcacaa atatgctgat atcctgnatt atgagcatgt aaattattct  480
caggggttaa gaaaatcccg aaaagaatgt aagtntctca gtccacggct tgcntcatca  540
acaaaaggnc aggn                                                    554

```

<210> 8716

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8716

```

aaaaaaacag gaccagttt actactgaag ctgcagcgag gttacagagg cgtcttgggg   60
ctcagtcctt gagctccggg acgccaact gggagtgggg cctccactct cctacgtaca  120
gacaccccca tagggaaacg ctcacatgct gtcctgctgg gacgctgcag gcctggccgt  180
tctgtggccg catccgcgtc cgggtccctg tgtcctggct gggcgagccg gggagggggc  240
tgattcctgg gagcggttca gcagcgagtt ctgaatgtct tccaggactt cacggaagag  300
ctcctctcgg gacttcatgc cgtccaggta gaccattcc acaccgttgg cctccatctc  360
ctgccataac ttctgtgata tgggccacac gtggccatcg aagaggccgg ggggatcagg  420
gactgtgtag ttgcgggtac ttctcctcca cttgcactct tcatacggga cggtcaggaa  480

```


gtaccggcgg ctgtacaagt ccaccagggg cttgtaactg tagagcagga agccttnca 540
gaagaagatt tnggtgtccg aggccttggc tgacctgacc cc 582

<210> 8717

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8717

aaaattatcc aaatgtgaac ttactggaaa gagaaaaaac aagtttaaag aagaaatttt 60
tcataggctt cttgttttagt agcacaggcc aaaggccttt gtcgtcgtct tgcagggtcc 120
ttataaatgn gtaagacaga cagcatttac tattgagtcc tacagggaaa cacacagaag 180
caattcattg cttgggagtg aaactatcaa ctaatcttac gactactggt tctccaagtc 240
ccctaataaa gaaaatttta acctcatgat catttcaagg gaatttcttt ttcaactgnc 300
acataataac ttggtaacnc aggaccaata tacatgttct gagttttaaa aatatactcc 360
acctaaacta tctgnctagt ttaatctttc tagttatcat ttaacctaaa atgagagacc 420
aaatcttatt tccattaaaa aaaatgaaaa aaaggcccaa tgganccttt tgaaagnng 480
taaaccctgg ggcttaaac aatccggnnt atcaaccctt ttgnccaaaa aaacggttgg 540
cctnttgat taaaaatggc cccnccc 567

<210> 8718

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8718

agttttctat caaccgagaa tgtttttatt accccatcaa tcctgaagga tcatttcacc 60
aaataggaat ttggagtga cagagtttg ttttgaggca gtcttgctct gttgccagg 120
ctggagtga gtggcaggat cttggctcac tgcaacctcc acctcccggg ttcaagtaat 180

tctcgtgcct cagcctccca agtagctgag attacaggca tgtgccacca tgcctggcta 240
 atttttgtat ttttagtaga gacagggttt tgccatgttg gtcaggctgg tctcaaactc 300
 ctgacttcaa gtgatctgcc caccttggtc tcccaaagtg ctgggattac aggtgtgagc 360
 caccgtgccc agccacaagt tgatagttct tctggcacta aaagaacttg tctcacttcc 420
 ttctggcctc catggtttcc agagagaaat ccactgtcat ctgagttact tttccctcta 480
 gttaagattt cacttctttc ttganccttc aacttttttc tggctttaag ttttcaaaaa 540
 tctggcctat catggacttn ttggggttac ttacttn 577

<210> 8719

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8719

caactttttg caaagcagca tagcaacaat cgtgattgta gcacttgcct gaggttgtgg 60
 tcacaaccaa cgtagtaaac atcatttgca tatcagtaag aaaaagaaaa caggaggaga 120
 tgagttctta caaaacaaag cagattctag agatttctact gtgtctgcat tgctccttcc 180
 acgcaagttc tcccttagct gaccgcaatc ttgttttctt ccaggaagtg aggaaactgg 240
 tgtttgggaa cgccgtcagt agcacttggg ttttccacat ctgcactgat acccgactgg 300
 gagccatcca tcttgagagac agtggcgta ttcacaacgg aggtggcccc caaggaaacc 360
 gggagggtag gaaccccccc actctggatc acagagatct cattggtctt cacggccaga 420
 ccgccattga gcatgctggg gtactgggtc cacacaacag ggtccacatt cactgaaggg 480
 gccnggaatt ccttgggnaa gaattttggg actctttttc cgncccnacc taacaaancc 540
 tnggggtctt ganggccact tc 562

<210> 8720

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8720

```
caggtttgca nagtgggaagt ttaatgggac catcaccng ataccatc acagcagtcc 60
caggctggag gccccaggct ntggccgcct ntcccagcat ggngggcctg ganagagcac 120
cagcaccacc tcccactttc cctgggggtat tgctttgccc ctgtgcctcc caccaccagga 180
agctacaana nacaggctgt cctgtcccca cactntccct gggtcctggg actccctgtt 240
ctgaggggct aaggttgcct ggggccanag ggccctcccc aggacaacc atcctntccc 300
tgngtccctt gccccccaca ctgagggaat gtctgtgtcc ttgttcctct gccagggggc 360
aactgaggct gccaaaccca ggggcggggt gcaagggtctg tgcggggagg gtggctcana 420
tccctgcaag gaggcntgct gcagggacag cacaccttgg gcccccggc agacattaag 480
gccaatgtgg cggcaccaat aggcttggtt ggcccttgcc ccggggcngg aacttggaag 540
ggcttggatt ccggggcttg gcccaattta atttt 575
```

<210> 8721

<211> 475

<212> DNA

<213> Homo sapiens

<400> 8721

```
ctctaaactt ctcttctcac ttcatctcat ccatttgatc ttcaattact gatacctttt 60
cttcacttg attgaatcag ctactgaagc ttgggcatgc atcacatagt tctcngcca 120
tggttttcag ctccatcggg tcatttaagg ncttctctac actgttnatt ctagttagcc 180
atthttgcaa atcttttttc aaggttttta gcttctttgt gatgggttcg aacatcctcc 240
tttagcttgg agaagtttgt tattaccgat catctaaagc cttcttctct cagctcgtca 300
aagtaaaagt ccagctttgt tccattgctg gcgaggagct gcgttccttt ggaggagaag 360
aggcgctctg atgtttaaaa ttttcagctt ttctgctctg gtttctcccc atctttgngg 420
ttttatcnac ttttggcctt tgatgatggt gatgnncaaa ngggttttgg ngngg 475
```

<210> 8722

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8722

```
ccttctttta cctttatatt gatatttaa agaaaaagaa catgatggat acgggaatgg 60
gggaaggagac aacggttcta cgattaacaa caggaactga taggaaccag aagctccaag 120
gatttaaaaa aaaataaaat atatatttat acatttatat atatatatat atatacagtt 180
atgtatgtga gtcccagaca agcaggaagc agcagcaaga agcaactagc acacagaaac 240
acccgtgcgt gtgcactaca cattcaagca aagccattcc tctagctagg acgcagcaat 300
ccccaccctc ccacctacgg gcaaaagaga acagctgaaa acaaacttcc ctctttaagg 360
gccactcagt aatttttgtc ctcttgcca ggaaaaagaa agaaaaacaa aacaaaacag 420
aaaaggtcga tcttgccttg aaagcggcca gnggctatct ctctctctgc caaagcagga 480
cacgtattct tacacagang gccacatngt gncntacaa tnccttanaca gt 532
```

<210> 8723

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8723

```
agtaataaaa gaatcattta ctattttcac tgagtttaca gtgttgggta ctactgnnta 60
catcatttta atgaaagtat ttataaaaac atctgcaata gttcatatca gaaaacaaag 120
tttctctcaa taaagacctt aaaaaataaa tttttatctt cattaactcc ctttctggga 180
atgggaatga aataacatgc ttctgtttta aaaaaaaaaa aaaaaaaaaa cncaaaatit 240
aataccctaa ttaggtttct ggaaaaaaag actaccctag caataatitit taacatticta 300
catttcatct atttctaaag aactccctt tacaaaatct ttagtttta tatattagga 360
caatcagggt tanagtctca cataaataaa atagccncat tagaaggcat actgaagaat 420
caaatggggt agccacattg gctgntccat tcacggattc tctaanance gttgggagga 480
```

gcctataaaa ctggtcacgt tagctaagta aaagggcnat ctgaccatgn tctacacctg 540
ngctttacaa aatccgattt ggggcccgg 569

<210> 8724

<211> 461

<212> DNA

<213> Homo sapiens

<400> 8724

ggaatgtcac tagacaatta aacttttatt gaagcgtaaa ttgtggtaca gaaatacatt 60
tcaactgatt taagtccaac accagtgaag ggagaaatta tggcaccaaa actttccctc 120
ttctatcata cgatgattta gattatgatt caaactacat ttctcttttc taggctttgt 180
cccataaaaa tttgtgcagt tttcaacat tagaattctt aattctattg gaaacaaaac 240
aaaacaaaac aaaacaaaaa caaaacaaa ccagacctca agtcaacaaa tctattggga 300
tattgtttac gaacaaagtc caccttaagc attggtcctc aaaacagagc tctcaaaaat 360
attaggtgct gngctcatta cagaatcaaa ctgacacact gattgaaaac ttcctcaatg 420
aaattttcaa tcaacaacat gctnnaaata aaagnnaann g 461

<210> 8725

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8725

gntttctatt aatcatttac ttgtctcagc agatattgcc acacagatat agagactaac 60
acgggtctaa gcatatagac aactgttaaa aagaaataac atgtcataca gtttgtgaca 120
ctccacagac gtttttgtac ttgatgaag aatgtggata ctacaaaaga aaatcagggt 180
ttaacaaaac tcttacagaa atgacatata caatatattc atatatatat acacacgcat 240
tgtgtgtgac aggttgggat gtgtgtgagt atatatgaat atattggtgt atatatatat 300

ttacctttat ttatgcatgg gatacaacaa tacacctttt ttttcttcat atgaaccacc 360
 ctcccactgc ccattaggtg ctagtcagta ctatttaaaa tacagaaatc ctgttcatta 420
 aaatatctta attaaaatag acatttcttc ccttagaaaa agaattaaaa ccttttaggg 480
 cctagcttta aaagcaacat gctacagctg attnatittg gtagtggttt tatggatgtg 540
 aaaatattac cactgaactg caggaactnt aattgg 576

<210> 8726

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8726

acttcacaca ttttgattta ttgaatacca ctgggataat acaaatttaa taattggaac 60
 attatttcat aaccattttt taaaattaaa ttttatctca ttcagccatt cagccagttt 120
 ttttttttta cattttatta ataccaaagt gaaaaatggc ctgtgcttat actacaagga 180
 tctcatatga atgcagtcct gattgttcga cacagcaaga aaattcactt tcacagtcaa 240
 caagtcactt tactcagtag aacacaaagt aaatggttta taactccaat atttgcaagg 300
 aaaatacagt acaaattact aaaaaatact aaaatataga attgngttca ggcatntcca 360
 ctacatcaat cgcagcagta acctgaaatt tgaaactttt aataaaaagt tcttaaatat 420
 aaattatatg gcaaagtca gtacattgct tttttcagtc tctttttcag tgttttgcag 480
 tagaacangg ttcctaccct tnaccttcct taggtttaaa aaacccaaac cacaantctg 540
 tggggagtcc ttncnttat gng 563

<210> 8727

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8727

ccttggagac tcttccatgg cctctggatc accatcaccc atgggagagc agctgtgccg 60
aagtgggtcc tgggtgcaggc cgccttcttc accaagacct tctgctcctt tcctcctccg 120
cttcctgctg ctgcggtggg gccgtctgac agcgggcagc tgtgcctggc cctccctcct 180
tggctgtgtg ccatcttcct gccgtctgac agcgggcagc tgtgcctggc cctccctcct 240
gtacatgggg ctcccaggct gtctctgtgt ctgccccctc tgcagggcgc tggcagctgt 300
gtcctccggg cgcttcttct tcttctctt cctcttcccg tggggagccg cagtggcctc 360
cctgatgtgc tgtgggaggc acgtctctga gccagcctc tgcggctctc ccacaaaggt 420
cttttctc tctcagagg ggctccgggg gggctcactg cctctggcaa ctggtgtgga 480
agggacacaa ggtcctcggt gacctgagga ncgccgtcna natggangan cacttccggg 540
gtttgaacgt nccttggggc tttggggn 568

<210> 8728

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8728

cacattatat aaaaagtgtg catttaatct tcaaaatagt caaggctcta atcaggttag 60
gttttccata gttttaagca ggactttgng gttttagtga anaagtcag gngcaattga 120
aatcactgta agaaataagn gacttttaaa acaaacacag acacacacac tcctnttaag 180
agtaatatat acncaacaca gcagctacat ggggtgttcag gcaaagggtg catgaacgan 240
aagccctntg ctccctgccc gatgagaaaag tcccanaaa ggattcagca gcagcaagtn 300
tacagcacia acatggatgg cattgtccct gaaaacacac agttaggtgg acctacagga 360
gacattggag cctagacatg tgggaaagg ctcagttcag tacattctac tgcatacact 420
tgaaatatta cagtngttt tttctccaga ctattataaa taatttttcg ngctttctga 480
aaaaataaaa actgaacttt tagtctgcga taaaggngac ccttntttta agcaagntac 540
tacatttgca ggatttgggg gga 563

<210> 8729

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8729

```
cttttgatta ttgaagtgca tttaatattg tgagaggtct ttgaaaaccc catcttgagc 60
agcttgatta tatatcagat ttcagtctat cttgggtaag atcatttggt aacatttgta 120
tgtcaaatac atagtgaata tatctataga tctcctcagc cttctgatga gttacttggt 180
catacatgga gatttcttga agtgagctgt tagccatcct tttcacagat gaaaactggg 240
gacacatatt taatgcagtt atataactta tattgggaat acttaaataa aactggagtg 300
cctcactttt attactattc accactgttg gaacatgaat accaacattc tttctttggt 360
ccactaaaga cagttccttt agcaaactctg cggtttcttc ttggcaggaa ctgaaaagaa 420
ttcggattcc agcgccaatt aaggtagtca gcaggctgtc atagctcttt gtctcctaaa 480
catccttgat gtgtctcctg tttttctctg tccttttccc aatcacacat attctttcaa 540
acttactctg cangtgccgg aactgntcaa tggan 575
```

<210> 8730

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8730

```
gtgggcactg catcacttta tttctttggt tttcaaactg tactctcgaa caaggcaaact 60
tcagtctccc acctgcctgg ccgctttgtg atctctcact gaagatgggc ctccagctcc 120
gagaaggcgc tcagcagaaa ggtggaatcc ccaactgaca gccaggctgg ccgaggactg 180
cagggtccca gcagggtgat caagcaccca caagcagaga ctctgggcca taatctgcaa 240
acagagcctg catctcccag ccttgcccca cctgggtccca cactccttgc aggggacagg 300
ccagcccctc agtgatctcc agtgcctcaa gatctccggt gcctcagtgc catcctttag 360
aggccagctg tggttctttc tatacatccc tgctgctgct cctgctgacc tggcaccttc 420
```


tcccttgggg atgccaggca caagctgctg atcagctcta catttgattt tctttctttt 480
 tttttttcta agagatgagg nctcactaca ttgcccaagg tggctctaac tcctaacctc 540
 aagtgatcct nctggcttgg nctnccaacg ctaggatac 579

<210> 8731

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8731

acagcataac agggtttggt tactgtgcca catcatgggt gtttttaaaa cggaatataa 60
 atacatgggt agggatagca ttttaggag aacaagtgac caaaaactaa gttacctctt 120
 ttcaggtcag ccaaaaaacg tgaagggaag gtggacttta tacaacttag acatttatgt 180
 agatagcaca gcagactcat gttcaagcca gccacctgaa acattataag tccgtcgagg 240
 gggacagcaa tctatgggtcc atggactgaa tccagcctac tttgtatgg ctctgagcta 300
 agaatcggtt taatattttt taaaggttgt taaaagcaaa taacaaagaa tacatgatga 360
 ctctattctt gttctcatgt gtgaaccata tattatagcc tgcaaagtct aaaatactta 420
 taaaccggcc ctttacagaa aaagtttgca gacccttctt ttacaccagt gctgtagata 480
 attctggcag tacaactgca agtctaagat aatgntcatt cattcccatc ataaatgtaa 540
 cattctaaat angngncttc tgatgtcatc tgnkanaatt 580

<210> 8732

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8732

gaaatacaaa ggacttttat tactgcacag tcattctaca aattgttaaa gcaggatgtc 60
 tgttttaaaa attgaaagcc ttacttataa ggagagcttg cctatatgat actactttca 120

gtgttaccaa aaggcttatg agcctaaatc tatectcata ttaatgggca cacttttaggc 180
 actttttcca agaagtgcaa acctgttcct tggaaaagat aaccactaa tccattagtt 240
 ttttcgcttt gaaaaagcag agagctgatg gaaaggcctt aattggagaa agcaatccag 300
 ggctgctggg tggaggctgg agaatcccag gtggaaggct gggcatgagc catacactag 360
 gtgtctcaac tggtagggtc aatcaagtgg gagaacagac caaaaaaact tgaggacgcc 420
 ctaaagagat aatctgcctc ctattgcctt cagctgcctt tctgaggatg ttcttaaate 480
 acctatgtag gtttagacca ggaaagctta aaggagacaa ctggaggaag anggtatcaa 540
 taatttanaa gtaggctggg catggtggct cacc 575

<210> 8733

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8733

aatcaaattg agtattaatc tttaatgcat ttttttttct catttgtaaa aagacatgaa 60
 tgaagttttg aggttcgtga gatttcactt tttcttgaat ggctcactaa agtccaactt 120
 gacaatgaac tgctctgaaa acgtaatatg atatataatt gcagaagcag gtagagtata 180
 aagatgatga ctagatggtt tctgaagaaa tcaagagaat ggtaagaaag tgagagtgac 240
 agctttaagg agatatatac tacatgtgac taaaataagc ttaaatgata ctctctactc 300
 acagagtgcc ttttgaattt ttaccagaat tcattcatta attttaactt aataagacac 360
 agcaagagca gtattagggtc taaattacct ttaaaaattt ggctgcagac attaatgat 420
 tacaaaacac tatgatcacc ttctgaaggt attctacaca tcttaatatg gctactgaca 480
 tcctagcaaa tgncaaagtg cagataacna gctnacttaa aactaactnt mnaacng 537

<210> 8734

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8734

actttcatta gtgctcattt attatttatg tagaaaagtt taaaatgctc ccaatgagtt 60
 catcagttat caagctcaca tgagtttagc ccactctcct ttggtttttc atctcataat 120
 aagtcagcaa aagttgacat ttatcttact agacatttcc cattagccct aactgaaaca 180
 gatatcaaac accctagatt ctcttcagtg caaagtatct ggagtcacag caattttaga 240
 gacaagctag tgcaatctag taattttcat agtcgcagaa aactgaggcc tanaagtgat 300
 ttgtacatgt gagcagctag aaccaggaca agaactccag aacctgggac cacgtgagag 360
 taaaaagaaa gggcaccgag tacaggaaca acaactgaca catttcaggt ggaaaaaaca 420
 agtcacataa ctgaaaacca aaatcacagt tacataacta ttttatatta gcttcctaca 480
 tataaagtat aaaaactcag ctatacatgg tatgaaattg tacaactta cacttggtta 540
 tgcctaaaat tgnataaggc ccncttatch gn 572

<210> 8735

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8735

gtctctgggt agtcacgcta gggctggcag gggaggaggc agaggaaagg cagggagaag 60
 agaaaacatc actgaaaaag aaggtgtcgg ggaggtacac cctgattctg accagcccag 120
 cccacacaga gggctctgaaa ggttctcagc cttctccatc acccaccctg cggcctctga 180
 aaagaggggc ccactctcaga caaaaagca gatactccca accttatggg gaaagctaac 240
 ggaggaatac tcacagcacc gtggcacggg acggcccttg gcttcagagc cgggctggca 300
 ccgtttgtaa acattagacc tggatgatgtc tggggatgga ggaggagagg gatgccagc 360
 ctggaccatc aggtttgatg aaagagacag ggtggggccc ctcaaggcct gggaaatgtc 420
 tattagctat gggaaagagg ctgacaggtt catggtgggg gttgccagag aaggtgtgga 480
 caaggtctga atctacctga ctatgtatct gcacgacttc agtgctacct ttggaagtgg 540
 ccaggcttct gaggaactcc actggcctgg ggtaatgaac n 581

<210> 8736

<211> 574

<212> DNA

<213> Homo sapiens

<400> 8736

```

agttgataaa aactttatit aaaacatgta aagaatcata tagttcaaaa ctgcaaaaat 60
aaaagacaat ttcttgtaac ttaaaaataa agtatatatc tagaaaccac cacattaaca 120
tctactatit atagtacaat ctccaattca aagctaattt ttgtatttct gtattttgca 180
acttttgagc tagaatcttc ctccctatcc aactatactg ttatgtaacc ccattgtttt 240
aacatttaac aatacaactt ggggtattctc tgacaagcaa gaatatatac tattgatcac 300
ttctatacac aaaataaaaa cagticaaat gactagaaac taattttaca aaagaaaaaa 360
aaacagggtta gtaaaacatt tcttttgaaa acaatgggtg aattagtatt ctgaattgag 420
ctagagcaca tttttgcttg aagactctcc atattaggca ctatgcattt atatagtcag 480
aacatttgca aaatgctttt cccggttatt aggactcaca acacctgggc gctgggggaa 540
tagccggact acctcagntt acacagggag aacc 574

```

<210> 8737

<211> 573

<212> DNA

<213> Homo sapiens

<400> 8737

```

gagacagggt ctcatctgt cgcccaggct ggagtgtggt ggcacaattt tggctcactg 60
cctggacctt ccaggctcag gagattctcc cacctcagcc tcctgagtag ctggaactac 120
aggcatgtgc caccacacca ggctaatttt tttttagtag ctggggtttc cccatgttgc 180
ccagattgga cttgaattcc tgggttcaag caatctgctg agccaaagtg ttgggattat 240
gggtgtgagc caccacacc agcctttttt aatttataaa atagagacag ggtcctgctc 300

```

tgtaaccag gctggagtgc agtggcaca tcttggtca ctgcagcctc gacctcttgg 360
gttcaagcaa tcctcccacc tcagcctccc aagtagctgg gactacaggg gtgtgccact 420
atgcttggct aatttttttt gncgttggtg ctttttttgt agagatgaag tctgcccag 480
gctagtctaa gaactcccag gcacaagtga atgctcctgc ctangccttc taaatgttgg 540
gaataatggc ntgagccant tgggcatct gct 573

<210> 8738

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8738

ggaaggccat atcctttatt aaaatcgcca caaatacaaa agcatcactg aactaaaaat 60
acatcatata cgtatattct catattctta gaaacttate acaggtttat tggctttcca 120
tcttatcaca tgtcatactt cgaaaacatt aaatagaaac aaaagtctcc atgcaatttt 180
cagatgaaaa acattctgtg cattttcaac ttgtgtgttt tcgttttagat ggttgaaagg 240
gtttgctaac aactgtttcc caatttaggc tttctggcca tgggagtgac atgtcctgtg 300
tcatgtagaa tttgatagct tgtaatgtcc atttaaattt caagtgtatc ttgccttctc 360
ttagcaaga gccagcctgc ggatattgga tatacaacca gctgcagctt cctggagatc 420
ctggtcaggg gacccaacca tatccagtag aagctttact gccattctc atgcatgggn 480
gatgcagtta tcggcgcttc tggaaagtgg tacaaggcct gactgtcgcc cgatgccent 540
tggggcattg gattcagata ccnctagtg g 571

<210> 8739

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8739

actgaaagaa aaacaatttc ttttaatttg gtttgttggt cccacacccc atctatcaat 60
 gtatgtgcta ttacaaata agttctatac agtatttttg cagtaccttt gataattcct 120
 agacctctat tttcattctg tgtattaatg tgaataacag atggatattt taatatttaa 180
 ggcagatggt aaactttcct ataggtcttg tgagacttcg tcttataggc tgaacaccat 240
 tcacaaaatg taataatgct tcattccttc aggttgaggt aaagaacttg agcaactgga 300
 ttagcaaagc tgcaaagaat gaaatgtggc ctaagatgta attatgttct ctgcccttcc 360
 tttgggccag ggtagttttg cacttgacac aatggaaaat aggccataaa gcctgaaaaat 420
 aaaatgttct aaaccccaat ctcacagcac tttagtaggc tttcactag gcacttttaa 480
 agtattttca acaaaatact aattaagcta ccacttcaaa agagcttcaa ggaaaagctc 540
 tgctttctta taaaatcttt tgagacagag tttccn 576

<210> 8740

<211> 378

<212> DNA

<213> Homo sapiens

<400> 8740

ggtacacggt acctcattta ttctcacaac atgcctgtga ggtagggagg ggcagggact 60
 gtccccgttt tacagaggag gaagttgagg cacacagagg tcaagtgact tgcccaaggt 120
 cacagacggc ggccaagctg gaaatgggcc cgggagcaga cccttggttc acctggggac 180
 gggggggggg tccccctgc agcaagcgcc agccaagagg atgtctcgga tgccanagag 240
 gcgcatacac agnatnagc atccccctcat gtactgagct ggcttcgggg ctgacccttg 300
 ccctccccta ccccgncctg caggcccggg ccattgcagt tcanggctcg tgacaccctg 360
 ngagtngat gcngnggc 378

<210> 8741

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8741

gcaaaacaat cagaaaacat ttattatact gaaatgtgta catcctacta ttaaaaaaac 60
 aaagtagcaa atttgctggt gccaaaattt atttagcctg tttcactggg acaaactcac 120
 gttcaatgcc actcagtata atttcaagtc tgataagcat ctaagtattt ttactccgct 180
 tctaaaacct gatgaggaat tcaaaataag cacacggcat taaatgacat ttattgttcc 240
 ataaatcttg agacccaaaa aggaatgcta aatagacaag caaaactttt aaaacaaacg 300
 agataaactc acttctttcc ccagtgactg gtacagaaaa catgtggtca cacgaaagca 360
 aagggaaaaa gtcagaaagg aaaactctct gcctatagga tctataggag ttacagatat 420
 tttcaaatcg atgatgaaaa tagatcgtgc ttctttgtag caaataatta acccccttta 480
 tgaataaaac ataaaatgtc aaagctttta ctcactggaa gtaagtttgn cttctnggga 540
 gagattcaaa actcaaaatt actcatttnc tatttttggc cg 582

<210> 8742

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8742

gaaagggaaa aaaaatttat taggtccagg aatcaaagat gacttgatag aattatgaat 60
 acatgcagaa ttggatgggt agaaatgaaa tcaatctatt taggtccagc ctaaggttct 120
 gatagccaat cagtagacac aatcagagta gtagtattcc taagaaacca ggataaatct 180
 ccaatgtgca tgagtttaat gaaccagata gattattgta tcgccaatat ccacccttat 240
 cccattctca gtcagatgaa ttttcttgct catgagggtcc acattgaaaa cagcatgctc 300
 agaaatgggg gtcttctcgg tgtactcctt tcccaggaca gggactcgtc gagggcccaa 360
 cagtggatca tcaaacttca tcagtttcac tttggaaagg tctttaattc ctcgattcat 420
 tttcattaaa cgcctgatta tggaatcaca gttatctcct tgcctgattt caattttggt 480
 tgagaagtgg ccattgggat ggctggggat tccngagaa accgncacac caggtctatt 540
 cttaaaacct taagnggggt ncaggacagc ng 572

<210> 8743

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8743

```

gaattcaagg gtatacttta ttacatgat ataatggta atcatgtgtt tccataaaat   60
gcttctcttc cactgttctt tgaacaaaca ttaaattcat tttccctgac aggggtagac  120
aggtgtcata atccctatit ccaacaggga atacagaagc aaggagagtt tcaacactgt  180
actaaaggag tgtgcacagg gcagaagcag ctggaactcg gtgatgcttc taactcctag  240
gccagcacat ctgcaccagg aaagaggagc aggagtcctt ctcgtctctt acttccaggt  300
cccggaggag ccacgtttta ctaaagccag tccctttgct gcactttttc accagcaact  360
tcagcaaatac ggtctgaagg aaagtagcac ggatctcctc aaaaccgtga gccttttagtg  420
ttttatacaa tccttttcagg gccagggaca ggaccaagt tgcttctact gcctcgggac  480
aatggctgcc atgctgcttt tgcanaaagt gactggcgat aaaggcaant gctgggaaga  540
ctggcttaac tggggcccan agtcancaca c                                571

```

<210> 8744

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8744

```

aaaaaaaaacc atgaatcatt tattcttttg ttgtctacac agacacttaa gtactgtatc   60
gctgttatgc agcggcctgt ggaggcccct gggggtggct gggcctgtgt cctgagccct  120
cagccagatc caggggggtgc ggtgtctggt catgtccact ccaagagcag tagcaccatg  180
tagaaggctg tgagcagggt cccctcggct gagtggcaga tgtaggctca ctgctctgca  240
gccccgaggg gctggccagc tcagagtga gaagagtcc tctccatggg tctagtcacc  300

```


catccgtctg acctggacgc tgtcatagct catccttggg cttcgattca ctgcctgaga 360
 gagactcttg tgcaggttcg ggggggccct gctgggcatc caggggctgc tcctgggaga 420
 ggtccatctc ttctgggctg aagagcatct tcaccaggtc atctgcctgc accctgtccc 480
 gctcgtgtg tgcaggggtcc anggtgaacc acagggcgat ggcacaacgc tgcccctggt 540
 gacagcctta cttcatgngg gtttcagtg 569

<210> 8745

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8745

gagaggaatg aagcgactgc ctttattgca tagacctttt caattgcttt ttanattggg 60
 gacggaggac gcgcatgaga cgaacagggg atatgaattt ccccgccccc acccgcgggg 120
 agaggaacat tagtgcaaat cctagcgccg gccccgggga acctgcccct cctgggctga 180
 ttggccagct aaatgggggc accggagtgg atggggcgag gctgcgggcc ctgaccggcc 240
 gactcactga ggcctacccc agccagtaca ttccagggtcc tgtcattggg cgacgcgtaa 300
 aatagactcc gccctcagcc atcctggccg ggtaggagca ggtggcaagc gtcaggactg 360
 agccctgccc cgtaagggcg gccccagatc agacgccagg ccccgccctc attgatcagg 420
 cactaccctc gggacgagcc catttctctt taaccgtgac gacgcccacc ttcagcatca 480
 cgtctggtcc catgaaacga gcgcaatcct ganacggggc cangggccct ggcaccacaa 540
 ctttacagcc aggccacacc cct 563

<210> 8746

<211> 575

<212> DNA

<213> Homo sapiens

<400> 8746

acacttacta agaaaaacaa aaatttactt caaattgtag tataggcttt tcaatcacaa 60
aaagaaagaa aagaacagtg atctgacagt ggtcacatcc tgtgcaaaaa acttgataca 120
aaaatgatag cacatggtat ctgagctgct tacattacaa gaaaaaggaa atacagtagc 180
tgaaatatgg cactcctggg aatcaacttc taaaccaa atagaatgcctt tgaaatgatt 240
aaatttattt gtgtattagt aagaaagccc caccaccata aatagtacaa tatttaaaaa 300
taaaaaaaaa tacatctatc taagatagat agtgtatttg tactgttaga cttctttaag 360
tgcagaaggt gggttcaggtt ttgccttttt aattaaataa ctgaccatat gctttataaa 420
gtttcactca atcacaaaag ccaatttaaa tcaaggaata tgatatcaaa gttgcataat 480
ttcatttggg actggcagca ggtaaagtc ttaagcttta acattaatgg tcatttttagg 540
caatggaata gttaaaaagt ctcaaatttc atatc 575

<210> 8747

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8747

aaaattgcaa tgaaaaaaat tttaaattcct taccaaaaca gagaaagaaa aaacaaaatg 60
cttaccaagc ccacaatata gctttcaaga tatttagatt aaactctaac ctattgtatc 120
ttaagcacat aataaggcac ataataagaa attaagtaaa tacacagtaa ttctgagtaa 180
gtattagaga ttatagnggt acaaaaaacc cttgagatta atttttttct aaaagaagac 240
cttaccaaaa ataactttta aaaaatctgt caaacatat gatagacctg aatattttcc 300
ttaagactgt aaactttttt tctgaaaaca attataaaaa agtagtttat aagtaggatt 360
atttttcttt aaaattttcc aagatcatat tacttgacaa ataagtgtca ttttgaaatt 420
taaaacatga ttttttctta ataaaattat tagttattct gacatcttat taacagatct 480
tagttgaatt ccacttaatt ccctggggaa gctgagacac tgnattttcc aatagtctta 540
aaaggtaaag acnggctttt ttaangg 567

<210> 8748

<211> 582

<212> DNA

<213> Homo sapiens

<400> 8748

```
gtgttccaat aaaattttat taacaaaata tgacagtggg ggggccacag tttgccaaac   60
tttgccttgg gttttgttct ctccacagac tgagatccag tgcccgtgga aaagatgtcc  120
ccagaatcaa aaaggtcagc ctccccctctg gaatgaccca gagactttgc aaaggggctt  180
ctgtccactc caggcacagg accaccttcc caaggtgcag cggcagctgc cagggcctcc  240
tcagtgtgtt cttctccact ggctgtctctg agctgtggcc gatggccatt tggggaaatg  300
gcgccatcag cccactgtgc aatgggtcct ctggggacgc tcatgtcctc agtctcgtctg  360
gactcctgag cagccagccg cctagctgca cgggtctgcg gtctacgctt ccctctcctc  420
ttgacacggc tcttgtttgc actgtgtaag gtgtctgcct gagctggaag atcaaaacta  480
caccggcctt cccactcccg ggaaggacag gcacactttt cagaccgtgg cttcntcttg  540
gtcaagatga aggaaaagcc aattttggcn aaacaggctt tn                          582
```

<210> 8749

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8749

```
gagatagggt cttgctctat caccaggct ggagtgcagc ggtacgatct ttgctcacca   60
ctacctccgc ctcttggttt caagcaattc tctgcctca gcctcccgag tagctaggat  120
tacagggtgtg cgccaccatg cccggctagt ttttgcatth ttagtagaga cagggtttca  180
ccaggttggc caggctggtc ttgaactcct gacctcaagt gatctgcctg cctgggcttc  240
ccaaagtgtt gggattacag gcctgagcca ccaagcctgg ccaccttttg gcttttttga  300
cagaactctt tcaattgtaa gtcagaaaac caacacaaac aggccttaac aaaataacaa  360
caggaatctg tctcacataa ttgagacatc taaacagtgt tactagatct ttgattctct  420
```

tggtgnttc ctttggtgct tcattcttgc tggctttctc taagtagtag gaaaagatgg 480
caccgggaag tcccatgatt atgtgaccct tacagnitca gatcaaaaca gaaagccttt 540
ctggaaccct tganaacaan g 561

<210> 8750

<211> 492

<212> DNA

<213> Homo sapiens

<400> 8750

gagacagagt ttcactcttg ttgcccaggc tggagtgcag tggcacaatc tcggctcact 60
gcaacctccg cctcctgggt tcaaccaatt ctctgcccc agcctcctga gtagctggga 120
ttacaggcat gtgccaccac gccagctaa ttttgtatit ttagtagaga tggggtttct 180
ccatgtttgt caggctggtg tttaactcct gacctcaggt gatccgcctg ccttggcctc 240
ccaagtgctg ggattacagg cgtgagccac catgcccggc tgcaatcacg tatgagtttt 300
tctaaaaaaaa ccgaaacact ggaaacatgg atgcatctta aagactttat gctaagtga 360
accagtcaca aaaggacaaa tactgaatga ttccacttac atgagaaata tgagtagnga 420
agttgatgat ngagacaaaa ngtnctggctg ttgctagggg aagggnaggt ggggagttat 480
tgtnaatggg cn 492

<210> 8751

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8751

gtaaaaaact ggctttatit gtcacttatt caccttatct cagttatgcc attttggcgt 60
ccacagtga agtcccctgg aagctggggc cagccccac ccaccaccg tgaccatcac 120
ccacagggcg tgagtgtggg ccttgcaggg cccagccgat gggtacaggc tgcaggcggg 180

actatggggc tctcctgag gcctggtgcc ttccagcccc ctgcccacca gcttgggtac 240
 agctgcctgc ctgccagagg ccaagcattc ccaagcgtgg gctgggggag gccctgcccc 300
 tctgtagcag cagagcagac agggcagtgg gagaaccatg tgggtaggag ggcatcaggt 360
 ctcaagagcc tctcccctgc tcaggactgg gtctagacaa ggccacgtgt gatagggtgg 420
 taagccctgg gccatatgga ggagcctggg gcccatcttg ggtcttgctt gctganttgc 480
 tgggtggctt taggcaantc cnttttgtcc ttgggcactc tggttcctgn ttagcacttg 540
 cancaaggct caaaatgtgc cctnt 565

<210> 8752

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8752

gtttgaaaag tatataacag atttctttat tattatttac aatcaagttc tgttggccaa 60
 cataatgaaa taaataaaaag atgtgccctg gcctgtgaat ttcaactctc cttgacttaa 120
 gttctctgaa gggcaaattg gaaagcgtg atcaggcagg gaagagaggg caggtggagg 180
 ccaggacat cggtgggaag gccacctgac tctctctca ccagctctaa cactcacatc 240
 cccaaatgtc cagagaacaa gcatggaaga aaaaaataa agtgcaaatt taaaagtgat 300
 aaaaagggtg tttcgcacac ccaatgaact aaaactttat acgtaggtaa aatagtaaag 360
 ataaatgttt ttccttggcc ttcatacaca cccctgaaac ggaaagatgg cgctgctgtg 420
 cttctgagcc taggcttctt gcactaaagc accaagggca tcgcacacag gcttggcaga 480
 agggccatgg ncagaatcac caccttcaga caagattgtt gaggctcgaa tccttggcac 540
 ccccaacttc agtngcnc ac 562

<210> 8753

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8753

```
ccaggtgtgg atttttatit tcacaaaaag acaacaatgt cttccccaca tacaagtatt 60
tacaaaaccc aactgattca cccatctana acctggggtt tttccactt ctcaacatag 120
ttgggaacat ggaaacatta ataccacac aattcccaga gatggaattt atccatcaaa 180
caaacagngc anattaccta aaagtgcact tacctgcaca actcgggtcta agaaccttgt 240
gaaacaaacc tcatggccaa ggtttcatga atctatttgg tttcatacca tgcaaacctg 300
aacaagtgtg ctgctacact aaactgaaaa tcggttctca tttacaatt aaaaaggttc 360
tcaacacttt agcaactata cagaatatga aggtttatit caaaaaagat tacatititit 420
taaaccagga tacacagatg cacttaatgt aacagtacct tctgcaaaaa tagggtacat 480
aatactcaga aatgcatgga ccaatcttat tctctaaaaa ttgaccgctt aanacttctt 540
aagngtanac agccttcaaa 560
```

<210> 8754

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8754

```
gcagaagggt aggtgtttat ttgcactgt tttataccgt ctaccagggt aaaaaaaaaa 60
aacagagact cttttgaagg catagattit agatatcaac ctcagactgt ggcatitggg 120
atttccagag catgtcgttg aggcactit gtaccagag gcacatggaa tttaccaggc 180
tgtggagatg atgtgtcttc gggatgtgtc tgccagtagc ctggtgaggt aggggaagaca 240
gcagtggacg cacagtcagg gcccagtaca cagcccgctt gcctttcgtg tgattgtcca 300
gcagggtggca cctgttcct cctgccaccc acctataat tgcttcctc ttgagcacct 360
tcagccagag gtgggtggga aggggaagga cgtgcactgg gttctgtat gtgccagcat 420
ctttggtata aggagccatt ccctgcccان ggcanccagc cagtaccac cggggnttgg 480
gaacattggn ggggttccat tggcccatgc ttntcctgt tntattagta gggaatcgan 540
gg 542
```

<210> 8755

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8755

```

agaggtgtca tgtttacttt ttatttagga gtacaaactg agacaaaatc atccttccag   60
ttagtgaggt tttgagggat cataactaaag agaagacagg aaaacaccag taatgggtgaa  120
ggctcttgaga aaaggacagg acccgcagat agcgagagat cagaggaggc cctaatttct  180
ttcctcattt cctttccaaa tatcccaaatt gtgcaatgca tcacctgaga cagaaggcag  240
aaagcatcaa gctctctgtt tatcccaatt caatgacaac cagaacttat tttttttgag  300
atgggggtctc gttctgtcgc ccaggctgga gtgcagtggg gcattcatgg ctcatcgcag  360
cctccaactc tcagtctcaa gcaaccctcc tacgtcagtg tcctgagtag ctggaactac  420
aggcatgcac caccacactt ggctcatttt taaaaaattt cttgtagaga caggatcttg  480
ctacattgcc caggcttgag tgccgtggtg cattcacagc tcaccgaagc tcaaactctt  540
gggctcaagc gaaccttctg ctttaagc                                     567
    
```

<210> 8756

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8756

```

caatgctgaa aggaactttt aatatcttaa cttgacccaa attatattat tatttataaa   60
agttatataa atgcaggctg attgttttta aagagtcaaa aagccaaata taagtaaagc  120
actagaaata aattcagttg taaaaaattg acatcattat tctaaatgtt atgtggaatc  180
acaggaagaa acatcattgc aatcattatt caaagtaata ttaaagataa cataagagat  240
gtttggtctt aaatgtcaat ttgaatgtat agtgtctaca ataatagatc aaagagaaag  300
    
```

taagtatatc tgtaataaaa acaagaaaaa atgagttgca aatactgtat tctacaatga 360
 aagaagaatg cagattaagg ataaaacagt cttaccaact aggccccctt aaggatcatt 420
 tttcagggtg gctaaaagga gtaacaataa agctctacac atataactaa aatgttgcaa 480
 ttaatctagt ccagcacttt nattnaganag ttctcaaadc anagtncaaa tatnt 535

<210> 8757

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8757

gagtttaagt taaacaccca tatgaattta ttaaattccag actgtgttaa agggcggcgg 60
 tctaggaggg ggagtggtgg agggggacga gggacaagat gatgaacggc cgtgggcatc 120
 ccgtaggggg gcccggcccc acccccggcc aaccaccccc ctcggaacg ctgcatcagc 180
 ttcacatga ttccagtggt tgctgggctg gcagggcgag atggctggaa acacagaggg 240
 acagagggac agacagcgcc tccacaaaca aaccctggcc tgccccggcc cctacgtcac 300
 acgctgggcc ctgacctgag gcgggcctcc caccgccccg gcctgatctg tccagggaag 360
 gggcgacagg gaggggaggg gagggggccg ngacgcaggg gtagtggtcg ccaggacccg 420
 gancaggtga ggaccatctc gactaatcct tttcttctg ctctgctgct tttgnagggg 480
 cttcctgggc ttctgtgcaa actggnccct tgggtgggct tngtgggcag gnacctggag 540
 gcctcctcct tgggtggcngg gg 562

<210> 8758

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8758

aaataaacca aatgcttggt ggagaagttg agcaggggag atgggcagta gaggttgcca 60

agacagggca gggggtctgg atgaggctgt ccgatgcctg ccagccacag tgatggtgca 120
 tggagggaag gaggagcaga gagagaagat aggcggtggcc tccgggatgc ccattctttt 180
 tgcagagagc agcggcagtg ggtccagggg tcctggaggg gctggaaggg ggcagctggc 240
 tggacatcca gaagcttttt cttccctcgg ccacgcctgc ctggcggcct ccagtcctta 300
 gcctccgctc cctctctctc tccagatgcc cgccccactc cgtgtccata gcagtgcacac 360
 agccacttcc ccagctccgt gtaattccca aggagcagtg gaaccccacc atctcaaagc 420
 tgaagagctg ctggccacac acatcctcta cggtttctcc ttcttctgaa cgccggcttt 480
 gctggccctg gaatcttggg aaataaactc aggangngaa aagttgactt ggttcttggg 540
 ggttttgttt ctggcaggca gg 562

<210> 8759

<211> 636

<212> DNA

<213> Homo sapiens

<400> 8759

ttgagatgca tgctttgcat acttctgcct gctggggagc ctggggactt tccacacctg 60
 gttgctgact aattgagatg catgctttgc atacttctgc ctgctgggga gcctggggac 120
 tttccacacc ctaactgaca cacattccac agccaagctt gcaggtggca cttttcgggg 180
 aaatgtgcgc ggaacccta tttgtttatt tttctaaata cattcaaata tgtatccgct 240
 catgagacaa taaccctgat aaatgcttca ataatttga aaaaggaaga gtatgagtat 300
 tcaacatttc cgtgtcgccc ttattccctt ttttgcggca ttttgccttc ctgtttttgc 360
 tcaccagaa acgctggtga aagtaaaaga tgctgaagat cagttgggtg cacgagtggg 420
 ttacatcgaa ctggatctca acagcggtaa gatccttgag agttttcgcc ccgaagaacg 480
 ttttccaatg atgagcactt ttaaaggctt gctatgtggc gcggtatata cctattgacg 540
 ccgggcaaga gcactcggcg ccgatacact attttaaaat gactgggtga gtctaccagc 600
 cagaaaacat ntacggtggn atgacgtaga naattt 636

<210> 8760

<211> 610

<212> DNA

<213> Homo sapiens

<400> 8760

```
gagacagagt ctcactctnt caccaaggct ggagtgcagt ggtgtgatct cagctcgctg   60
aaacctccac ctctgggct caagtgattc tctgcctca gcctcccaag tagctgggat   120
tacaggcagg tgccaccatg cctggctaata ttttgtttta gtagagatgg ggtttcacca   180
tgttggccag ggtggtctca aactccagtg atccaccac ctcagcctcc caaagtgctg   240
agattacagg catgagccac cacgcctggc cccaaactga ctcttgacca aagaatctga   300
tttggcaaac caaatcttag tgcagtgttc gctcctcgtc cccttaccca gaacatgatt   360
cagatcctaa cataaacaca aaaacaggtc aggggaaccaa aacactgtgg tcttgctatt   420
atacaaaata ttgagataat gttcacgatt cattctgntt tcagcaattg ngacaatttt   480
gaacttctct cgaacttcga aacacttcat ttcctactaa atcccaaacg tgtaaacang   540
cttcaccagt gggacttggg ttgggttggg ttttttgana aggaatctcg ctntgtaccc   600
agcttggagg                                     610
```

<210> 8761

<211> 457

<212> DNA

<213> Homo sapiens

<400> 8761

```
gngggctttt ctaattaacc agggatcatt ttcacatcc tcattagact catctaaaaa   60
tgggttgaaa tcgncatcat ctccagaact catgttttta gagctctcat agtcactttc   120
ttcattatca gaggcatcag attcacttcc actgtcgtca gaactgntac cagtaaggcc   180
acctactttt cgtgcttttt tggttctcg agttatttct tcacctttcc gcttctttat   240
tttattttct ttacaaggac tatctcttgg cgaactgttg ttacttggag ctgtcaaadc   300
gattcctagt aaactataaa gttttttcct gtctggagca ggaaaatgtt tttcaatgag   360
```

tgactgcaac acacctttgg cagttgaaac aaaatcattc aattctcccc cgccctcttc 420
caaagcttct aangntctag cttntccngn anactgn 457

<210> 8762

<211> 612

<212> DNA

<213> Homo sapiens

<400> 8762

atctttggaa aatttaattt ggaccatatt ttcttctctt ttctgaaaac atcaaatatc 60
cccatacagt ttgggttcca cagcttaca aggggcagtg ggtttccgc agttacatac 120
tgtacccaac ttcttataga aagataaaac attttccaac cttgcttttg agtatttcct 180
aaaaaatgct ttaaagtttc cttacaataa atggcaagta aaacaaagta aggctttttt 240
tttctccttt tccccttttt atgtactgca tgttcgagga ataaggaagg aagactagtt 300
ccatcagagt actagtaatc ctagtaccct ggggattact gctggatcct ccaggtata 360
cccctattat tgaggccctg atgcaccct gcaactgagga acctgagaag ggtaagtact 420
aaacagtctg tcatagccac gtgggactgt cacagcacan gtgggactgg gagtcgccag 480
ttcttctcgn gctcacagga gtaacaaagg aactaggact aaaccttacc agaggcttcc 540
acgtggacta cagtccacac gttantttgn gggccttaca atgccctttt tgacccaatg 600
attactggaa aa 612

<210> 8763

<211> 612

<212> DNA

<213> Homo sapiens

<400> 8763

agtttgtagg aaaagtttat ttaatgggga gactaagacg atgcaagatg gttactagaa 60
aaacatcttt cagtctggat aaatacacia caaaggatca tagctgaaat accagtgacc 120

atcacaaatag gaaagggtgg cagcttgtgg aattttcctt ttggtaacct taagaagtca 180
 ttttagcagt actaaccata cagtatatgt caggcactgt aataaactct ttacaagtgg 240
 tacttcattt agtcttcacg acactgaggt agatactatt aaatgtcccc attttacaag 300
 taaaaaaatt gaggttagag aggccacaga aggtacctga ggtttgggaa gtgtagaacc 360
 aggatttaaa tctggaactc ctaggcaaaa aaaagtgttt taacaatcac aatatacagc 420
 tttacattag taaaattttg aatttggttt tgntcattgg tcactatgca tgttttaaaa 480
 tgtgagggtt atagcttatac tggtaggaca aactctttta cttctaattg atggctancc 540
 aacatatctt caaaaatact attataatat ncctaatttc aacaccaaac acctntccaa 600
 aaaactaatt ct 612

<210> 8764

<211> 616

<212> DNA

<213> Homo sapiens

<400> 8764

cagaccagct agatattttt attaatgata tataacctct ttaaaacatg tatatttacc 60
 aaaagcattc tgatatggcg ttcctctagt gtgacttttt gcatgtaaata taatacagcc 120
 tttttgacct tccatacagt caggttcctc ttcagtgtgg atgtttccta acgaccaagt 180
 tcaagggtt tccaacatct ctttcactca tgggacttct caatgtgtgc tttgacatgt 240
 tcccaaagtg gaagctaata acaaagaaga atctccacac attttacatt cataagattt 300
 ttcacacttg tgagatcaca gctgaatatt aaggtataag gcagagcgaa aggtttcaac 360
 acattcctta cagccagagg acgtgcattt atatccaatg tgctcacaag ctcagtaagg 420
 cccgaggaaa ataatgaaag cttttccacc ttcctcacat tcatagcatt tctctccagc 480
 atgagttcaa acagactcag taagatgtaa gcatcgacag gtttctaccg tcaagttggt 540
 tcctaggatg cncagacnca tgaatagtan ggctatggaa ggagcccaga tttncacatc 600
 ctaaatcaag gctcct 616

<210> 8765

<211> 589

<212> DNA

<213> Homo sapiens

<400> 8765

```
acagcataac agggtttggt tactgtgcca catcatgggt gtttttaaaa cgaaatataa 60
atatatgggt agggatagca ttttaggag aacaagtac caaaaactaa gttacctctt 120
ttcaggtcag ccaaaaaacg tgaaggaaa gtggacttta tacaacttag acatttatgt 180
agatagcaca gcagactcat gttcaagcca gccacctgaa acattataag tccgtcgagg 240
gggacagcaa tctatgggtcc atggactgaa tccagcctac tttgtatgg ctctgagcta 300
anaatcgttt taatatitit taaaggttgt taaaagcaaa taacaaagaa tacatgatga 360
ctctattctt ggtctcatgt gtgaaccata tattatagcc tgcaaagtct aaaatattta 420
taaaccggcc ctttacagaa aaagtttgca gacccttctt ttacaccagt gctgtagata 480
attctggcag acaactgnaa gctaagataa tggctattca ttncatcat aatgtacatc 540
tnaanagggg cttctgancg actgncnaat tcttttaact tttcttcat 589
```

<210> 8766

<211> 614

<212> DNA

<213> Homo sapiens

<400> 8766

```
atatcttata ggatttatca caaaatgtta ctgccagtg catttttgca aacaataaca 60
attcactgag agtaataaca ttcacatatg taattagagt ttaaaaatgt aaaaaactta 120
gggtaacaaa cactttaaac ttatttttta gacattcaat aagcccatc tcccacaaac 180
tgtttgatta caaagaagca caatgggtta actgtggcaa aacataagaa ataaggcagg 240
ggaggcagat acagacttga gaacataagg atatccaaac aattttgtca atatcaaaag 300
acaaaatcaa aacatctttt ataataaaa acaaatccat ataattaaat actaattagg 360
tgaaagatta tagggatat aacatttatt ttctctacat aaatttgcac atcttaaatt 420
```

taatgcaaaa catcatgttt caacttcaac ttaacatcat aacatgtagt tcttggtgag 480
 tctagatgta atggaatgaa tatttaata gacttcaaag atcctgtcag gttttaattg 540
 gtattggtgc ttaagnctta atgctttctt tattatggac taagccantt tagaaccaaa 600
 tcncaccacn ccct 614

<210> 8767

<211> 611

<212> DNA

<213> Homo sapiens

<400> 8767

cttttaaaaa gtgatataatt aaacttatat acaggataat tagcaaaatg tagaaaggga 60
 aaacaatgta caaaagacag ataaaaacca tcaactctga cggatagtca caatccaaaa 120
 atagtataaa ccttaacaaa ccctctctaa accaggatcat attcacatct ccccccaagt 180
 tttgtcagtg agaataaaat atactgaact agtgagctca gtctttcttt aaaataggct 240
 tgactttgga acatgaacct tggatagatt tttaaacaatg ggagggacaa acaggaaaac 300
 cattctatct atccacttaa ttagtactaa ttaacggaac aaagttatta aatagctctc 360
 agtgctaagt caagccatta ttcagaggcc tttttgtttt tctgctggtt tcggggtgag 420
 ttctttaaca agcttcttat cctgagggtca ttccagtaga ttctgccata ttctcaaatt 480
 caaatggcgt gattccagtt gcaaatttgc tcatgtcang tatagggtta tgaattttan 540
 tgggnccgtg aaggctggtg ctgcagaaaa gactttggtt gcccatgntg atgccangtt 600
 gggncactg c 611

<210> 8768

<211> 613

<212> DNA

<213> Homo sapiens

<400> 8768

aactttctgc tctatattgt ttgtttaccg ctgtatctcc cacagcttga acagtaccaa 60
 ggtaccgtag taggtgctca ataatgact attgaataaa tgaacatata caacaaatgt 120
 tctcaatgta aaggatcaga gatgccacat gttctccttg atgggagaga cccttccaca 180
 tgggaatgat gggaaggagt tgtactcctg gatgttcagt aactgcttct aggagaaaag 240
 gtagagtcct atcactaagc cgcagatatt tatttgtgtg tggctagaat gggatgtttt 300
 gaatcttctg ttacaacctt gggaacgtgg ctgttatttc aatttatgag ccagaaattt 360
 tcacatcccg aaactgccca gagttccacc agcctgggta tagtatttgt tataatctag 420
 tcgtaacagt agttgagcca aatctgagtt gatctgatga ttccgaacac tggagagaat 480
 cttgaacagg agtgaagact ggcggtctaaa gcccttcacg agaatgctca ctgggccggn 540
 tncacgctca tccagtggcc taggtctgac tgccagcgaa caaaactgtg cngagactag 600
 gattcattcn gcg 613

<210> 8769

<211> 618

<212> DNA

<213> Homo sapiens

<400> 8769

ctttaagggt cattaatttt ttttttccct gattacaaaa gcaaaacctc atttttttgg 60
 tctttgaaga ccatggagta tgacttctaa gagcaaacat taacatcaga tttgtatgtc 120
 tcactacaaa aagaacccat cactgatgta agacctactc atgatactga agtagatttt 180
 ttaaattaaa aaataaaagt agtcatttaa aatggaggaa ttgtagatga gtatggaaaa 240
 atccattcac aaagttcact atttgcattt tctaaaagaa ttttatgtaa taaaatagaa 300
 aactaatgat ttatagagat gtgcataaac tcaagagagg aatatggaag ggaaaactgt 360
 gttatatcc catttaatt taaaaaaaaa agataaaac acttgaaatc tgtgtttcac 420
 atattagaaa aaaataaatt caaatgattc taattccatt agcttgtaa tgtctccatc 480
 tctaagatgc tgccaagata gcacacaact ttctctgaa tatgcaccta acttcagggt 540
 aaaaagaccc cagtcctcac tcgggaccga acacgttncc agagaaatca gaaggaatta 600
 tgnaaancnt ancccntc 618

<210> 8770

<211> 614

<212> DNA

<213> Homo sapiens

<400> 8770

```

gtcatgaaaa aatttgatgt tgtttattgc aaatacaatt taaacaagtt ttttttagtg   60
tttgtacaca atttgtcaat ttttcaatat tcaattttct gtacaggtac ttttgggaca  120
attccttatag ttacataatg tgaattcatc aaaatgcagt taagaaactt acaggaatat  180
atacacttga acccaagacc caaacctgac attatataca acctatttac aaatacatat  240
ggacagacaa tatatgtaca tagattatca taaatattga aaaatagggt agctttaatg  300
gattaatggt gttctataaa taacattaca gttgtaactg aaacatccac ggaagacagt  360
aatgcaaaat gaggtgacaa gacagtgggt ttaatactga agactgctca ttaatgggaa  420
ttcattgttc aggaacctca aggtagacaa gatagctccc agaaaatcat ccattggaat  480
ttcccttagg cacttgattt tgaaccttaa atagccngag gattggagga gcttcctcac  540
ttaattgctg tagagaaaag aaatTTTTTT ccattcttct tggtggcaca gtatntnttt  600
ccatcaaaaa aaaa                                         614

```

<210> 8771

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8771

```

gncctctttc tcaggaagag acagtaatga tttgtatata cggacaccaa aatctctttg   60
aagcatttcg ttgaaaagtt ccgcaaaca tgaacctca aatgaatgtt ctttattatc  120
ctctaattctg tagtccaata ggacactcaa agacatgatg ctacaatcaa acttgccact  180
tttgcagcc caatttggat gtacaatgat ggccggttca tcaggcaaaa tatatcttct  240

```


ttctcgacgc tggcgttcta tttcctcttg acgtttcctt tcttcttctt ctttatcgtc 300
 ttcagatttc ctatcatcat cctcatcctc ttctttttca gatttctcta actccttctg 360
 gtcttctttt tggctcctcta ctttaagctg ttttgtcaat cgggctatta actgggattt 420
 taatcctttg gaactaagag ctcgactttc taattctttt cggaggtcat ttaccttcat 480
 tggctttgga caagttaga ccaatgggta ggtgtagaaa ttcttttagct tcaccatcat 540
 cctctcttct tnannggct tcatannnc cntgggtcac ccga 584

<210> 8772

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8772

ccagattttt tttttattca gtacagatgc aaagtagtag ctcanaggct ctgggtaata 60
 gcattcctga gattgatgac atccattacc tccactagtc aacttctcca gactaacgca 120
 naactttctc ttcctttggc ctttcctctc ctgccattg ggccaattcc ttcgatttct 180
 catttccctt gaagttaggg ccattcacag tttcatggtc aaagccagtt ccaggttcaa 240
 tagtctgnga tttatccagg ctctgaggta tgcaccgctt ctgttttgct cgttcctcca 300
 agagctagtt tggccagaaa ggggatgctt tataccatag aacacatcca ctttctagaa 360
 cctgctctag aaggccaggc cctcagattc cacatggttg gatttctggc caagtctgga 420
 gctttcttca cacttngntt ttaaaactnt gggttcaaaa aaaactgnnc ntgggtgagan 480
 aagaccgggt caaacgagg cccctggagg acctttggaa ccttgggaagc t 531

<210> 8773

<211> 589

<212> DNA

<213> Homo sapiens

<400> 8773

gacggattgn gaaactttat tgataaagaa ttccgttcca aaggngtatt ccagtcacat 60
 ttaccctaca taaaatacca acatnttctt attgcaaaaa cagaaactcc ggccgttgta 120
 ttgatgctga cttagagaa atagaagcct ntatataagg caagagtcca taccagaaga 180
 attcgaccaa tatgagatac ctccaaaaaa atcaactcaa taacctactt tatatgtaag 240
 agacccaaaa aagtcagctt ttgtgggaag ttgatatgca gtttattgaa caaacagagt 300
 gtacagtaac taaacgaact gtgtatttcc aaaggaatta agaccgcata tctggattca 360
 cacctaaaag cacatagaaa attaaaccaa agaagggcaa gttttgacta aaatcacttg 420
 ggcccangtt attctataag aagattctca ctggcatttg atagtaactt atcacctttt 480
 gngcgagctt gggaccagct gctcaggaac tggttctgct tanngcgga tgcccaatgg 540
 gcagcttaaa gacttattgg naanttagaa tagaagtnt nccccngg 589

<210> 8774

<211> 613

<212> DNA

<213> Homo sapiens

<400> 8774

gtttgttttg ttttgcagca gacaatatca ttcagcttgt gtcagtttc cctataaggg 60
 taagaaaagt ttccatcagg tagccacttg tttttatact gaaagactaa tctgctccaa 120
 aatgctccca agtagaaatg acaggactca aaatcccttt ctaaagccca acagctaact 180
 ttttctgact aatctctagc ttcatgaaa ctggctacca agattgcatt tcaggctaac 240
 aattggcttc ttagttaagg catcacaact gaaaatgggt atttcaacaa tggatgctgt 300
 ggatgaagga ataccaacaa acttctaaga actctcatca aaaactaaag caatttgctt 360
 tgccccagtg gcaggcagaa ggaatttagc ccattatctc acaaactagg aaaggatttt 420
 tgaattctga actagcagtc tgcacttgtc acagtaacta tatgtataag ctggatcatt 480
 ttgatattca gngacttttt gnagtttaga atatatatct gnagcactt ttaatcatcc 540
 ttganatgtg ggcttinctat ttggaaaaat ttttttattt ttccaagac ccccgcccc 600
 ccccttacc tta 613

<210> 8775

<211> 444

<212> DNA

<213> Homo sapiens

<400> 8775

```
acagcatcca gagtactttt attgccagaa tccagataca gcctgctcag agcccatgt 60
ggggccactc aggaacaagg ggagacagat gccaggcatg tatgcaacag agaaaatcca 120
gctgcacaga aaccctgttg gagagcagct cagtccagcc tgaaggcgtc tttgggaacc 180
ccacctagag gctgtaccct tttctcggcc tgtggccagt caccactta gaggcctactg 240
ccatgaaggc agccctgact ctccatgcct gctgccacag ggagatccat ggagcacct 300
ggggcagaca gaaagcccct aggggggcct caggggaccc ctggctctct cagggtccca 360
ttcaagtttc tgggctagtc ccagcactaa gctgggtgct ggccangtg gataggancc 420
ccatcctnan ncctgngctg accn 444
```

<210> 8776

<211> 547

<212> DNA

<213> Homo sapiens

<400> 8776

```
catatttcat ttccatttta ttacatgttc acattatttc ctgaaatcat cttagaacct 60
tttgtttttg caaaatttta gaggtccagg cctgtgata gctatgtgat gttttttcca 120
gcacataaag caaattcatg atgtgaaaga ggcaaataac aatagttaa gtatgtctta 180
ttttgtaata ggattttttt aataaaaaat tattgtggaa caaggtagat taaatttggc 240
ttgcaattag gaaatatggg agccggactt gaagagcgtg tgattgagtc cccacatcta 300
actgatgagg aaacaggctc agatgggtct attgatgggt ccacttgcta gaagcaaac 360
tggaactaga aaccacgccc tggcttctag gcagcaagca atagttttgc taattttgtt 420
ccccagcatc aaaacaaatg cncaaaatgg gaaaagacaa atgggtattt agttgggtat 480
```

tttataaacc ccatatTTaa aacttaaant aagTncatgt aaagaactgg ccccaaccga 540
tgaaggg 547

<210> 8777

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8777

gaaaccaatg cattctttat cgcagactga agcttagggg ctactcact gtgagctctg 60
atttgggggc atctgtggct gcccacactt tccaagacag acaagggcaa actctccaag 120
cagaggagaa aacaacttcc agaagctgcc ctttcaaagg cctgaggtga ggacctgggg 180
cagcaggcag cttggcatgc aggggttaac cagaaaggcc gggtctggag ggctgggcac 240
acctaaccct catctcctgg tgactgcagg tcccactccc ttcttcagga gtgccatgca 300
gactctggaa caatctaaca ggccaagtgt ctcccagggt gggttaggga ggaggctgaa 360
cacaggctca gatccctgga agtggcaggg agagaactga gagaaacttc accctctgct 420
cggaggacat cccagccta ngtccttgct tctcaaactc taaagtgctt ataggaatca 480
acttgggggt ctttgctnaa atgcagggtc tgagtcggga ngtatanggt ganggctaaa 540
ctttgn 546

<210> 8778

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8778

gttttttttt gaaaaagagc ctacagcacc cccacccta cctcaccact ccccaaacca 60
gtcaagagt taaagccagg aagtggggca gactggggag aggaggcttg tgttgctccc 120
tctagtgttg gttcactgct gtgcagcaca cagcagtatc tgggtcaatg aggacatggt 180

cctagccttt ctttctccac caggaccctg acttatctgg ctggcccagc atggaggaga 240
 aggaaagcgg gccgtgctgc cgggggggatt cctggatccc tctgcatgct gacagacagc 300
 tgtccacagt gggtagccaa ggtgactggc attttgatcc cagctgaatg aagactggat 360
 ttgaatgcag tgccagggtt gttctgtaga caagagcgaa cagtaccctg ttcgctccct 420
 tctgcagtac cctgaggaag gagagaggca cccaaggcac gaatgcagac aacagangga 480
 ctggncangc tatcccggtt tncanctgtt tgtgccacaa gccaccactc catactttat 540
 gtc 543

<210> 8779

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8779

cattataaaa tgtcaaacat gaccacgtgg gggtgtgatt agcaattaga gaaaccccat 60
 cctagtaaat aaaaagtgtt cccaaatagc acctatatgt ctttctgact gtgggtttaat 120
 gagtaattaa gaccattcag ccaagattta catttgctgc cacctttaat agcactgatg 180
 aaaagtagaa cttttttttt tgacttcttt ttcactgtgc ctctaataca gaaatttttg 240
 ttaaaatatt aagggttttt aatgttttaa gaatgagaca taaaaaagtt gcagaaaata 300
 aatgataaat tcttatttat tgaaagacat tcagttgagg aataggata taactgtttg 360
 ttaggtaagc ttatatggca catgattaag ttccactaat tcgtatttct gcattatgct 420
 ttctgataat tccggagcat tatactcatg cagcagtggg aggaaagtac tgatgttttt 480
 ttaaaaaatg gtccattctt ggccagccnc atgggttacg cctgtaattc cagcactttg 540
 ggaggc 546

<210> 8780

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8780

```
ccatctttat cggctgtata aacatctctg gtctgtacat acatttcata catcgtaggg 60
tgggaagcga gggccaaagg gaggcccagc agcacaacag ctcacccgnt ttccttacag 120
ccctacccgn tntgtgcaaa ccaaggccaa cagctcctgc tgcctcttcc tccctggaaa 180
agtcactgtt acggggaggg ggccaggggt tgaaggatta gaaggagata gagggcttgg 240
tggggaggac acatgtaagt gctagaatca aacactgaag cgaaacaggc aactggcaca 300
agcagcaagc tgaggcatgg gacggggcan gaaaagggga gggaggggcc acgctgcccc 360
tctgggcttg ctcagctaag gctctgggggt cttgccctac gctggcaggg aaacaggccc 420
cagagcctca cccaataacc cgggagctag ggacatgggt ggcaactgta aanaaagggt 480
ggaaggggaa aaaggantna aggcctant ggccctgtna cttaaagccc n 531
```

<210> 8781

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8781

```
ctctatttaa tgttttattt tggaagaaag aattgcatgt tcagggcac ccatgtagacc 60
agttggtcct cggtatgtcg gaacaacaca gagaaggctg gaggttttat caaaagaaat 120
gtcagtattg ctctttgaga aagtttattg gcaccaggaa ggggtgttggg agctggcaag 180
ctacaactgg tgagcaaccg ggcaggcaaa attattccta gagcttcagc aagttctctc 240
agcagttatg gacaaagctg gtcccagctt acagcacgca gtttcaccag ctggatgtgc 300
agagaattac attactagat taatgttatg tgcctgaggt gcttttatcc ctggcttctt 360
gacttttgat tgggtgtgat aagaatgact taatttggtg taatccactt tcacagcact 420
gacatactta agtatggact ganggttgct gaattaaccg gtgtgtaccc gancccaaga 480
aggcttaatg aantaggaat tactgnttaa gcctaagacc ttattataaa ttttgtcc 538
```

<210> 8782

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8782

```

aaaaaaaaagg ttggaaaaat tactttatga agccttaagc actaagaata attaattaaa   60
ctgtaatcca ggattagata caatttaata atagttcaat tccaaaataa aagttattgt   120
aggtaagacc atgaaatttc ctaacgcttg attttaatac attgcgctaa ttttctaaaa   180
caactcagag gaacccatat ttacagtagg cagaatattt atgaaaaaaaa tctggcatca   240
ggtatattta tatatatgta tgtgtgtgta tacgtatgtg tgtgtatata tatgtgtgtg   300
tgtgtgtgta tcccagagatt atatgaacta agaaacaagt tgtgtatctt aacagcagta   360
ctagagcgca gagtttcaga ctggattta taaatgcttt caacgtgtgg tgtttgaaa   420
aggagaagac atcatctgat tttcaaaacc tggaagtttt tctcangact ggaagtcaaa   480
atcgnactgc ccntanggg aaaagggaac cttttcnta atggtcatct nc           532

```

<210> 8783

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8783

```

aataatatga atttaaaata gccacaaaca gggtagagtc atgtaagcgg ctgaactgcc   60
agtacagggg aaggtaaatg ggcctaaact atgataccta gcaagggttg gatctgtgca   120
ggcttctatg tacagagaca agcagggtta ggcacttaaa gctttttgat gaaaatcctg   180
ggaaagagct gaggctacat ttattattat tactatcaaa acaacaacat acttttcatg   240
aagaaacatg caatcagaaa cattacagag actgaagaga gcttaagagt tttctgaaaa   300
tgaaatgaca tgtttttcca gagtatcatc tcaattataa aatttgatgg ttttatatta   360
tcatatttct tcagtggtaa atacctcatt aaaaaattat taaaaaatta ttgacaatac   420
aaagccctag ttagtataca aatattacta tactgggtccc atcttgtaag ggaaatatcc   480

```

catctagata tctaaatata ttctatcatc caatatctta aanccaattt cttaaattg 539

<210> 8784

<211> 479

<212> DNA

<213> Homo sapiens

<400> 8784

ctaaccagtg aggaaaatgc agaggggcag tgggttcatg agaaatgtta tcctttctac 60
atgtagagag aaagctggga ggatcttggt agtagaggga aaaaaacaat cacacagatg 120
aaaggataag catcagaaag gagcagtata gaaaagagat taaatatgca ctcttcata 180
caaattaggc atttagtaca ggttctggca tatgggccag ttctaattcc tgatgaggca 240
agggccttag acaaagagca ggtggagcta gccaaaggtga ggaaaattcc agacaatgat 300
ttgagacttc agctgttcta tttcttcttt cttttattgc caaatactga aaggagacta 360
agcaaggaag ctggatatga aatgtctacc ttcttgactt acggttcatg ttgtggtcct 420
tcctatttcc accttaaaat tgacagggcc tngctnaaat ttgngctncc aangatncc 479

<210> 8785

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8785

atatacagaa gctaattgtt attgaacgta acagtatatt tcatgtagtt tcccataatt 60
ttttcatgta ctaactcatg taattctttg ttttttagag atctgaagtg attttacctt 120
tacttccttc actttaagcc aatcatgaaa ttccagtgat ttctgggggtg agggcgaaag 180
gtggtgttac gaatcatcgg ggctgtggcc cagttgcctc acggaggtgc aggtaggctg 240
gggcctcact agggcagctg gaggagcacg gactgccctg ccggcaggca ggtgatgttc 300
cgagagcatg agagctggta tgcaatgtct tctgcagctt ccagcttgca cagctcgtc 360

tggccgtccc ctgcagtggc cagtgagttg gcgatcagct cagctgcctt ggagtcaccc 420
 tcagcagaga tgatggccgc cttttccacc acaaactctg cgctctctgc ttcctggggg 480
 gccacctgtc tggtaactnc tttcaagaan gncanatgtg tcaaaaacac gttgtccana 540
 atgagcccca aaggg 555

<210> 8786

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8786

gcattgttaa aatgtttctc catggtgctt ttaatgaagt atatgcaact agtttaacag 60
 catgacaatt gttattccaa gacatcctca gtaacttttg aaatagcaaa tttaaatttt 120
 aacatgttct tatatttaac atgtttgata ttttcttcta gaatatcata gcaaataaat 180
 attcaacata caccaaaagt acttaaaaga agctcctttc ctttggacat caacttttaa 240
 aaacacgaac aactttttga aagacagaat ttacaaatac agaactgtac tgacttaaat 300
 ttggaattta ctaattactg gggatacttt agtgagtctg catatgtgta ttattaatac 360
 atgttaaacc atactgcaga taacaaaaaa tataacttaca tttctcttcc agagagtaat 420
 gactgtattc aaagtctgag ggaatgacaa aacgggatgc acatctaaca ctgatcccng 480
 ttcttcagaa aagactagtt tcagctggtt ccaggnntac ataagatgat ggaagcngtc 540
 ttt 543

<210> 8787

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8787

cttcttttgt tctttttgcc ttgtttgttc ttttaactngt tctctctcaa tatccatgaa 60

aagtcgtcta tgtctcaggt actgcttttg acgctctttc ttatcttctt ctttatccac 120
 gtcanactga aatgccagng gagcttgga ttcagngctc aatcctgatt gatncctatc 180
 ataagccaat ggcactccag gagtatttcc tcttgcaatc tcccatttct caaaagatga 240
 gggtagtttg atatgcttgt tctgttctct aggggagctt tggctcctgga ttttaggtnc 300
 aacatattga tgatagtcca naggcaattc ctctctcact ctttcttctc tcataaaaga 360
 tgcaggttgc tgatttttga tgtcatcctg gtcctgggat ttgggaggca aacactgata 420
 gtctgccaga gaaaagcttc tctcccttcc tcatctgnca tatcagagta tggctcctta 480
 aagnnactt tctganattt tggtagaaaa tcttgggcct gacatttggg an 532

<210> 8788

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8788

ccaggagcag ttaggtacac acagtaaagt ttatttttgt gcatggtata cttcactcca 60
 ttaaaaataa attaatcagc aaattcctgc ctggctcagc tctggtttat gtaaatagtg 120
 cccagctgta atgagttaca aggtgttatt atctcacaca cacacaggag gcttcactct 180
 agagctccgc tcgcaacaaa agcatcttaa ataaactgag agaagcggtt tgatttgtaa 240
 tgttttcaca gaagtgggat atacctcacc catatagagt ttctttatat gactcatttt 300
 atagcaagtt aaatgaagga agtttgatgg gggagggagg ggcaatatgg ttccccaccc 360
 ctttcttca ctttaagaaa atcccccaag agatgaccgc cactgaggga ggaggggctg 420
 gtcctcangt gctcagacca aggtggctct gcagcacctg gcttcagaag ttgggaangg 480
 gggaccaaag cttgggcccc aggtcttggg ctggttacac taanccngga ngaatgttct 540
 tttntcccc ngn 553

<210> 8789

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8789

```
ctctngatt tggttttcta ctttggtncat catganctgn ggctgcatct catacanaag 60
ctgacacatn tcgcaggaat gcccataaa acagagcgca aacaaatcac ccagcagggt 120
cgcttcacct ggctgttact gctgaactcc ctacttntaa nagnncagaa nanaacatcg 180
ctttgaatct acagataagc gaggggtggg cgagcagcag ccagggtgc cgggatggga 240
gcggccacag acacaggccc ccgggtgtct gtcttganat acaggtggan aagccgccc 300
agaaattcca gcaagatggg agcagctggg ggatgctcca gcacagtagc ctgcctacag 360
gactcctctg gctccctcag tcctggtaga ttctggcntg acaccaaggc cagcagtgt 420
ggctcttggc cctgtcactg ngncctggtt atcctggggc cccaaaagcc ctttttttg 480
gcagganctt cgnccctccc ttttnataac ccccttggn cccaanaaaa ccccag 536
```

<210> 8790

<211> 475

<212> DNA

<213> Homo sapiens

<400> 8790

```
caactacaaa aaaaaaattt tttattaagt gtgaaagcaa aacaggtcca tctattttaa 60
tattttttac atatttatag atacaacaaa gacaaataac ttagcaaaaa ttacaagttt 120
aaagaatagt actattttga aacagccaat atagtatctg aaaatattcc attttatcca 180
taatcagtga gtattatttc caaaaaaagt aacttgcatt ttcttgtgaa aaatatggtt 240
tttttttttag atgtctgcc aagatttatca gaaaagtcca tctttctaaa cctaaaaaat 300
tgtaatgcct ttattgagaa ctttttttac ctaatggctt taaaaaccac gtgttttcct 360
ttggacttag gtgaattcta aatctttact tcactttcaa actacagggc atngacntaa 420
acaaaaacaa atcanatnga gagttttggg ttgcttttct tnatactgng cgaan 475
```

<210> 8791

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8791

```
ctactcaaac tataagcttt tattattgta ttttacagat cattcattca ggacatgctg 60
catctgggggt tggcatcatt tcccttttga atgacagaat gtgcataaaa gtctcttgcc 120
cacgctgaac tcacacgtgc ccggcaggaa ggagctctca cgaagtgccg gctggatgtg 180
agcttgctct ggcagcagca gtgctgtcct tgtttctgag ctgccaccta ttcactggag 240
ttaggtgggt caaagctgaa atttagcttg gaatttaagt ttctaatttt atacttttca 300
ttgnggtctg gtcagatfff agtctgcttc aaaatcaaaa ggtcactcag tcactctaata 360
atgatcattt tgaatatgga aatttggtat ttacatgctg tacctcaaat caaagaaaaa 420
gcacgcgtca atatcacgcg taggaaaaac tagaaaattg ttccttttcc atttgcccc 480
tggttangtt tcctcataac nggtcngctt ggaaaccaga cttccccctt naacagatgc 540
cn 542
```

<210> 8792

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8792

```
caatctttac aattttattg taaatcatag tgtgagatac agctgcaaata atagggaagt 60
aagttcacia actgttattt tctaaagcta aagctaacaat taggccttgc tatggtagaa 120
ctcttcactg gggtgtttct taaaaaaaat tcacgcaact gacaggagga attgtcttta 180
ttcttgcatc aatgataaat gtaatctaca agatggcctt catggattag aaaaaggaat 240
cagaccacia ggaaaaagaa attgctgggt ttcactcaag atttatctag aaaagtgtac 300
tgactactgg aataatagtt tacccttggg ttgtaccaca gaatgagaaa ttctacaaga 360
ttatacaact ctttttctac aagattacac tactcatatt gnttttattc cattccggaa 420
```

ttagaaatta acttttctaaa tatcgnntttt tttctccaaa aaaatccttt taccagctaa 480
cctgggatat ggccaaaaat atcttgatnc tggnaaaggg ctatctccct agtaaaaaat 540
ggaataaatt gn 552

<210> 8793

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8793

aaaaccagaa tgaaatttta ttgtgtaaag tttatagaag tatgactagt attcctttgt 60
acaaagtaca caacggtttt aaatataact gagagaaatg tgagtcctat gacaacatct 120
gatacacgct gaaccattta cagacacact aaaaatgttt taaaatatct tctttctcca 180
aagagtccat tgcgcatttc ttagagtaga gatggggaca cattccaggc aaggtcacia 240
tggcattttg ttgccctcaa tgctgatttt cactgcgtgt gcagatctgc tttttttcct 300
tatatctgtg aactttctca tctgtttatc cagtcgactg atacccttct tggaggctgc 360
ctgaaacctg gatgactcca tttccacatt ccatttgggc ctgacaacat agtccttggt 420
tgaaggcatt gggacccttg cacgggcaca gaatccaagg atctccangt cttaaaaccc 480
ttcttccttt cttgtaacac cttttttcaa gggctnttct ggggggtctg accccccann 540
gctgttnatt t 551

<210> 8794

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8794

gcaaaacaat cagaaaacat ttattatact gaaatgtgta catcctacta ttaaaaaaac 60
aaagtaacaa atttgctggt gccaaaattt atttagcctg tttcactggg acaaactcac 120

gttcaatgcc actcagtata atttcaagtc tgataagcat ctaagtattt ttaccccgc 180
tctaaaacct gatgaggaat tcaaaataag cacacagcat taaatgacat ttattgttcc 240
ataaatcttg agacccaaaa aggaatgcta aatagacaag caaaactttt aaaacaaacg 300
agataaactc acttctttcc ccagtgactg gtacagaaaa catgtggtca cacgaaagca 360
aagggaaaaa gtcagaaagg aaaactctct gcctatagga tctataggag ttacagatat 420
tttcaaactg atgatgaaaa tagatcgtgc ttctttgtag caaataatta acccccctta 480
tgaataaaac ataaaatgtc aaaagctttt actcactgna gtagttggct ttttgggaga 540
agatttcaac tcc 553

<210> 8795

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8795

aattttgttc atttttatta acataggaca tactaaccaa atattatcat ttaataaaat 60
caacgttaca aagaaactca ctagcaaata aacaaacgat attcacttga ctcttctctt 120
ggttgaatga ttttctatta attagtagta cacagctatt tttatcaatt tatgcttaaa 180
ctgccttatg atttcaatga aatttcttag cttttacttg ttgaataatt ttttcaattg 240
ggaatctttt cataattcaa aatagttcct gaaaattaat gcatccttca atgtcttcta 300
cttaagctgg gtgcatttaa aatgcaacac aattctttga aaggagacta tgacatttga 360
gcataaagcc tataagaaaa agaaatgtct tccctccccc catgcttcac agagactata 420
tgaatgttcc atactcttca tatttagcaa caggagttcc ttagagatca aacagcagaa 480
aacaggagga acttangcca tcaatggact tgtaaaacag ataaactccn aatgnatttt 540
aagattccat cttcttcaca gatgaa 566

<210> 8796

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8796

```

ggggggtgca nagctgtgtc tggaaccacg gntagagcca cggncggaac tgngcacaga   60
tgccttcctc ttccggncca tacttcgact ttggtcttct tcttcctcgt aacgactttc  120
tcggnccgct tttcgggctt cttcctccag ttcatcccaa tcctttccac tctctttctc  180
actaccaat gactccttan aatagtctga ctcttctgct tctgatgaat aatcttcatc  240
actggcctcc tcttctcttt catagtcatc ttctgaagga ttaaaagtct catcttcaat  300
ttcagactct gaatccccctt cttcagcatc actccccna ccctnaggct ccaggaaaga  360
ccagccacct tgntcgaaga anccctnagg gtcatacaaca atggncctca tgattttagt  420
ccagttgagg gactgnactc cttctgggna tttcaggtcg caggaattca accattcctt  480
gatggggcaa ganaagcttc nggaatggcg gttgacatgg cactttcttg ntggagnccc  540
tgggg                                           545

```

<210> 8797

<211> 481

<212> DNA

<213> Homo sapiens

<400> 8797

```

cactacagac agaatatctt attttattgt gtcgcataat cctttcctaa aaaaaaaca   60
ctgcttctcc ccagttacaa gagactaaaa gcatactaaa aacactttat cgtcattact  120
aaatgcatta aatacacatc ctaaattggaa tatgctgtat atccgatgaa atacatagaa  180
cgttcatcaa ggcaaaagaa aagacgtagc caacaatgga aagatggcac acacaagaaa  240
aaaaaagaac agttctcaaa tattgcagta acttttcaat gtatcataga tattctatga  300
cttttctatg aaacagagga ggaccaaaaca ttatacacag ttggaagaga ctaaattgcc  360
gagaatctac agatatttagc atccaggaat aatttttatt cctggcccat tttctgcccc  420
ctggaaaaaa ttgcattgtt tttccttccn aagaggncnc ncaaaaaant tntttccatn  480
g                                           481

```

<210> 8798

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8798

```

gaggttcana aatgcatata ttttttactt acaaattattc atctgaccaa aattcaacat   60
aacctttatg gaacacttaa caattgtttt gtttttaaaa taacatttca ttcaaactgt  120
atataattca gtaaagtttt ttatacagca agcaatgctt aaaccctgga aaatntgtan  180
aaaagagatt ttcacacaaa ataagaaaag aaaaatctga ggtatccctc acacacacac  240
atccattcat tctggcccat gtacgtgcac atacacacgc atgcctgtgt gttcacacag  300
acatattcat tctcactcac aaagnggctg cagcataggc aaaaattgta ggtccaaagg  360
aaaatgattg attgtttctaa taaagagtcc gagtagctca gaaaaaaaaa ccaaaacaaa  420
acacaagagt cttctgagga aattactacc tcaaaaaaat gttctcaaga tgaatttgag  480
atctaagcct actaaactgc ttttgcaaaa cagcttcctg cagtccaagg ngacttgggc  540
aaatagaaag gaat                                                    554
    
```

<210> 8799

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8799

```

atgaacttct tttattcaaa tatattttca cacatcttat ctaaatacat aacacagaag   60
cctgtgtgac ttgggcaacg tgggccagga gggcctgaga ctaacacatc cacctcggca  120
aaaggacatc aaatatctct tacagtcgga acaaacagcc ttttgtgtat ttccttagtt  180
tacgaaatat actcgaaatg ctattattag ctgaatttgt ggtttccttt tgagtttctg  240
agttattctt atttattttt cccattttgt ttttgacca aggagaccgg agtcaaataa  300
    
```


tactcagcga ctgatttcct ctctttggac tgaaaaatta aacagatact aaatgatgac 360
 agtgaattta gagagggctc caagggcttg aaagaacatg tctgggataa tatggtgctt 420
 ctaagagtat tgcaatcaca tcgtggcaat caccggcgcg tgccgcgtga ctacctcctc 480
 ggctaatatg ctttcttctc ggcgatgact aatcacgttc tattaaacag cagtaatgcg 540
 ggaagaactc ggctgtncaa gtgtaaagg 569

<210> 8800

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8800

agcaaaacaa aactgtttta tttatcaaag acaatgaaaa aattagaaaa tacagaagag 60
 gttataaagc ataataaatt ttatTTTTTg gaaatggaaa aatgtccctg aatagttaga 120
 tgtacctttt agtagtaatg tctaataata aataagaaat caattttata aggtccatat 180
 agctgtatta aataattttt aagtttaaaa gataaaatac catcatttta aatgttggtg 240
 ttcaaaacca aagatataac cgaaaggaaa aacagatgag acataaaatg atttgcaaga 300
 tgggaaatat agtagtttat gaatgtaaat taaattccag ttataatagt ggctacacac 360
 tctcactaca cacacagacc ccacagtcct atatgccaca aacacatttc cataacttga 420
 aaatgagtat ttgcatatct cagttcagga tatgtttttt acaagttaat cctaaagtct 480
 taagccagga agcttttctt agtncaggat tttattggct aagctttaca aattaaccct 540
 taaaaaattn ttccanggtc n 561

<210> 8801

<211> 376

<212> DNA

<213> Homo sapiens

<400> 8801

caataaatac atgctgattt attacaggga taagatggtt tcttggggga tagattcaag 60
aggagtgan aatgttttat tcatttacia tgnccctttc ctggaagggt ggacagcaag 120
atttaggaca agctaaaatc atcccctatt taaaaaaaaa aaaaaaaaaa agtcaccagc 180
aagtantccc gggngggagg tgggagcana ataaaaaaaa atctgcantg attcctaatt 240
gtttttcaat acanaanctt gggaaggggt ttctgccagt ttcattgagga aggcccaact 300
tccaggtagt gttggggang ggtatgaggn cctatgcagg ctggcctctt atcccacaga 360
tgccaanatg atgnnn 376

<210> 8802

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8802

catgtcatac taaatatitaa ttttctgcag actgacttcg gagtaattct tgagccagga 60
ggggagaggt tagtgttcaa attgctgaga tcttaggtca aaaagctaca gaaaagaaat 120
cactttgaaa aacacaatga ctcanaggca gtcacccctt gccagcaatt ccaagagctg 180
aggaggcttc atgcctcagg acatggtgac tagttgagtg aaccagagat tgaggcagtg 240
gtttttacag gggaagaaac aagccttggg tgtatgggag caggaaagga ggggtgacaga 300
ctggagaaat gataaaggcc attttgaag cccacaggga agtggctctg ggaaacctga 360
agacactggg atattcagaa ggccaagggg atccagctta tcctgttggg caaggtgctg 420
ggagtgaagg caggtaagcc atgtcaaggg cctgggaagc aaggggaaaa ctggaagggg 480
taccacaggt gaagaagggt atggaatggg gtgcanaagt ccatggagat gaccggcaga 540
tctcaggccg gtttttggca catnaaa 567

<210> 8803

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8803

```

atttttccag aatgccttta ttttcagtat catagaattt aaatacagag tcaaaagatg 60
atttataaaa tataaaacat tttctgcttg gccgtatttg aagacaagct gaatacatat 120
ctatgttctg aataagtcca ctatggatat atataggaag agatatacat atatccatcc 180
acagatacac acacacatat atatttctgc atgtatatat acataattct ttctatagtt 240
acaggaaata cttcttctat aattctgatt ttgactccca tctccacca tttactcatc 300
cactcattac ctaaatcttg gctttcttct ctatatgtta aataatccat ccaaacttct 360
agccagtact gtcaggaggg ttcttgctcg agtgagctgt taatactatt ttccactgac 420
aacttctgca catcgaggga cacagtgtat ctgaagactc cgctgnatac ttccacaacn 480
gggggcattt tcntttgtag tcggcatgga caatacttat aggaagaact nttacgaatt 540
cnccccttta agtggggn 558

```

<210> 8804

<211> 503

<212> DNA

<213> Homo sapiens

<400> 8804

```

gngtgtgtgt gtgttttgnt ttgtntctgt ttttaataac aacagtagga cccaaactaa 60
aaagtcggtt catnttcaaa ccaacaagag cactagagga cttgngactc agtaccttca 120
tataacacca cataaataac tttagccaca gtcaatgttc acagcctggt cagtgaaca 180
aaggaaatac ttttctggcg attagacgtc atntgcagag agagctggga tattcatccn 240
aggccgggtg aaaaatgcc a tcttctccct gaaagactga acttntgggg gttccttaca 300
gctntggcct nggagcctgt gcacatcctt ggcagctgcc ctcatcatct tgnctgtctg 360
aagctcaccc ttgtgctccg ctcggnccat ccgcttctcc agcatnctna gcagcaggcg 420
gaaacgctcg tcctacgcaa ccaactgtggc aagcttcttn tcccngggt cttggcttgn 480
tccanctggt ncttgagctt ctt 503

```

<210> 8805

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8805

```
ccttgcaact aatggaatgc tctacaaagt tgagggtcag agggggaaca attatataga 60
aatttcggag atgtatatc tttggccttc gaaattctgg agcaaaaacg tctacaagca 120
ttttgaaata ttctgtgcct tcggcagaat ttcgtgtgtg atcactgagg actgaatcca 180
aatgccttgc tgcttttaat gtttcttctg caagaccttc ttcttttact agttcttcaa 240
aatttacaat atcttcaaga tcaggaacaa atctaattggc attgctgcta caatgaagac 300
caccagatct tatcattcgt acatagccca tagcattacc aatctggctg atgagttgcc 360
tgaattgatc aaggtagctc tgtccctcag gtgttattcc aagttttctg atgcctcgat 420
tgaatttttc tgctctatca aaaggatact tatgatcatt tnggccttaa tttccctgaa 480
aaatcgaata tctttaatca atctggattt gatgggtcat catacataaa ttggctaaat 540
ntntagaact tctttttcaa aa 562
```

<210> 8806

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8806

```
ggggaagcac aagctttatt ggctgaaagt tcttctcagg agcctggtct gctgggactg 60
catgttcctg gatgggctcc cccaggccta agctccagggt ttcctctggc cttccgaagg 120
attttgnngg ttacnaccaa ctgatcaaag atgacttttt cctggcgctt gctcanctgc 180
aaaagcttca tggngttttg caacctcttt tcttgntcaa acaatttttt atgtagtttg 240
gngacctctg ccttcatttc tccaatctgc tcacagtga gggggcactg gccatcctcg 300
gggagtgaga ctntccanan aagcttcanc cncctgtagg cctnttccag ggtcancttg 360
```

gccgtgctca cactgctcac aaacttgctc agtgggtgctg ggtgtggacc ctttgttccc 420
agctcttgac ttgtggagct gggagcctct tgggtttgaa tgccatttca gcaaggacct 480
ttgccctggc tgaactgttt ancanggnct ataagccna aan 523

<210> 8807

<211> 559

<212> DNA

<213> Homo sapiens

<400> 8807

acaaaaagaa atctttattc ttcagcaggt agacaacatc tgccagccct ggtcctcagg 60
gccacactca tatgcactca cccctcagca gcatatcgcc ccttttctga catataaatg 120
caagagaccc aggaccctag atctttcttc aaacgcaagt gtctcacaca cacttatttt 180
acaaatccac tagaaatatg gactcttatg ttctttgtac agccatgcaa cagaggccta 240
gcatttgtgc tgtgtctgtg ggaaaggcag tcagagacca gtggtttccc tgctttgggg 300
aagatggctc aacagttagt aatcccaggt tagattgtca gaacagtcta ggccaggact 360
gagggtctag ctgccagggc tccccaacag aaaccactcc cctctggctg acactgcttc 420
cttgcgaccc agtctcttct tgnatccag gggtttggct aaggcccga tcacctgtgg 480
tttgtaacgc agcagcacan ggggtgggcag gcgaatgana acatgcatgc actgcaatgc 540
nggngaanc ggacaagcc 559

<210> 8808

<211> 401

<212> DNA

<213> Homo sapiens

<400> 8808

gtctttttaa aacatcgtaa cattaacaca tggcgtttca ccgtcccca gcgatgggag 60
ctggcctggg gccagggtc ctccaggatc ttcactcatt cacagtaacg gttctgacca 120

gtcctccagg tgcacgtgg atgcgacagg ggtggggagg gaggaggaag tgactgtccc 180
 acctntgcag gaccatggga gtgggcaagg tgttctccgg ggcgcacccc tgaacccagg 240
 ggtgctgcag gacttgggcg gcactcagcc tctgcttggc gtcacggacc ancagcttgg 300
 agatgaggtc tttggcancn caggagatgt gggcccagtc cttgnngggg aactcgnact 360
 tgccctcctg gatgctctta aacagcatgt tctggcnngc a 401

<210> 8809

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8809

cccaaatcat tatattcttt tatttataga ctctgagagc aaggacccaa gcacagcctg 60
 gtgctcttgg atagagaaga aagcagctat tgtccacact cagaggttgc tgaggtgccc 120
 tccccactg atctggaatg atctacactg ctagtgaaga ggagggatgg caagctgact 180
 aaataagaag gcagggaaag aaagtccgct ttagttctga gggctgtgac attagatgag 240
 agtggagccc tgggcatgtc agccagcctt ctgtgtaacg cccgcccagg tcccattgtg 300
 tctgttctct cggctctcca ctgttgccca catcttctc caggctgctt aagtgccctt 360
 cctggagtgc atgagtaggt cgcgttgagc cccagcctcc aggctggagg tcagtctggc 420
 tgtgggaggg tcggtcggca gagtcaattt gttgaaaaca cctctgcaa agtagtcagc 480
 aatcacagaa aactgcattg gagcacctga gctgatgctg gaattgatca tggaaactcg 540
 ttctggttcc tggg 554

<210> 8810

<211> 580

<212> DNA

<213> Homo sapiens

<400> 8810

gcagatcata gtgctttatt aacaaattca tgtgttcttt tcccatccct ttaatacaaa 60
 aaaattattc atcagttatt ttcacttgac atttactaa gtacagaatg cataatgtca 120
 acattattag atcagccatt caagtgggtc acataagttt atcctcattg tgccaaattc 180
 ccactcaaag gataagctga ataacagatg cctccagggtg tatacaacaa ccttagtttc 240
 ttgacttgaa ctagtcctgt ttaacagggtc aaactgctag tctttctaag taaactaaaa 300
 aagactcaag tacacagctg tacatacata tcatcagatg gtaagttcat ttcaacaaga 360
 acctctataa ctaactgtac atttgtacag ttttctgcta tcattgcaaa agccccctctg 420
 aacaaactta tagtttagaa tttaaaacaa tcctgatgag acaaaacgta ccagggtggct 480
 tttctgnagc agaaattaat tccaccatct ttnccttaagc caatttaaag ccaaccaagt 540
 tggaaaataa atttgcagcn ttcngtaacc aaatgtctnt 580

<210> 8811

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8811

atataaaaat aagtgtttat taacaaatgg gctcagagta gaaaatgcag acagatgggt 60
 tcactttacc atattttggg atcatcatct tattgcgtac agcactgtag gcaagtaaac 120
 gaaaccaaag gctggctccc ctggccgagg cctgggactg atgcaagaca gccagccagt 180
 cacctccgcc tcccatgaac ctcttgaaa acttctcctg tcccacttct gtcaccctcc 240
 agctccttga gagagccaga gttgagaaga aaatgagcct gaagttgaaa gggaaagttc 300
 ttgcctgaaa cagtgtctggg aataagtcca gaccatttcc ctcaagagcc acctcttcac 360
 tccttaagcc agaggacacc acaagacac agttaatggc ctctcatgcc actcctcagg 420
 tggcttgtga gggcagccag tgagggactg caggatttca ngggaagtag ctcanatggn 480
 ccactcagaa cttttggaag aatttgangg acaagggtccc gcagtcgcac ttttgagcat 540
 nttggcattg tccaaataaa tggggtcaag ctttttcaat cng 583

<210> 8812

<211> 506

<212> DNA

<213> Homo sapiens

<400> 8812

```

agaacaaaat ggttttaatc aattgcgtca ccctcactct cctgggagcg gagcaacaaa 60
aaggctcggc tcctggtgag tgggtgggttg atcgctgcat ccagtgtaaa gcttggggct 120
gctggggagg gaggggccga gtaaggact ttcccatctg agtggctcag gagacccacc 180
cctctccctt cagagcagca ggggacagag aaaagccatc acttctttgg tctttgtggc 240
ggctcancat gtgggatggg aaggagggca gaaagggcag agaagggccc ttagcaggaa 300
gcgccacctc agcagagtag gcctggctgg gagctctggc agaaaggtca cagtgaggct 360
gaggagcgcc caagaggaga atggccgtag tgcagaagtg ctggcatgga tgggtggggt 420
aaggtgcant gccccaccct ntgccanggc ccttgggaaa ggcaaaccct ccaaagtggc 480
catgaaaata ggtncagggn cnnact 506

```

<210> 8813

<211> 473

<212> DNA

<213> Homo sapiens

<400> 8813

```

actttgagta tcttgctttt gaagctgttt aatacaacaa tgatatcttc taggtctgct 60
tgagagtcag ttccttnatg cccaactatt tgataaatat cttcagattt tccttgggtg 120
aacctcagta tccaagcacc tgggtttgct tttaattgaa aatacccatg atnggccatc 180
actattgtat caaccacagc aggtttattt ttngngccta gngtgaactg cagacccccga 240
ggaggctgtt ctgtcacttt atcaaagcat tgctccttcca gtagtaagta ttctagttca 300
tattctgctg taacagtttt ctcagtatcc tttaagngaa tattatcaag gncacagttg 360
ctgtgcactg tttcaaccaa ccagccttct ggagtaatca tgttgaggat taggaggggt 420
gattcaggaa tatccaaaaa ttttgccnct ggnccaanan aanaaacgnn tta 473

```


<210> 8814

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8814

```

cttgctaate tttctatatt taggggtag agacgggggtt tcaccatgtt gccagcggt 60
cctcccgcca cggctttcca aagtactggg attacaggca tgaaccgccg cacacaccac 120
ttgtatctcc tatgccgtg tcaagcagca gcagggcggg gggaacggct gcacctgcac 180
tgtggcagct cgcaggcctc cctgacgtcc aggcgaggagc tttctcaagt gtgggtgcct 240
tgggtccgac ccaggacccc ctccccagct ccgctcctgt ggaggagacc ccaccatgct 300
tcctcaccac cggctggaga tgcctgacc ccctgccac tgcgccctaa cattactgac 360
tctaaaccag aaccagtgcc ccaccctgtc ctcaccgtcc tcacccacg gcattctgag 420
tgagggacgc ccaggccac ccactccctg gactcacttc tgtcccccg agagaccttg 480
cccgggacat gtaccacact atgccctcta ctggccaact tanccctggg gaaccaatgg 540
gtgaagaagg gaagtcctca cggncagc 568

```

<210> 8815

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8815

```

aacagtccag ctgtggttta ttggtacat tcataagatg ttcactccta tatatatttt 60
ttccctaggg gtttctcatt tctagattta cactttccct catagcatgg tccctccaag 120
gtatatgctt ccgatacata aaatgtttgt aattttgtta attctgcat tcattagctc 180
aataatttct ctcattaaaa ttctgtaaac tatgaatttc aaagaagtct attctatatt 240
catctgggtc atgaagtttc ctctttgnga atcttatgtt agtaaaatga ctttacaacg 300

```

tttaacatgg ttcctcacct gtatgaactt tttaaaaaa ggtatgactt gctgctaaaa 360
 attttcagag tggttactaa attcagtttt cctgtgtatt gnctactatc tttttgcatg 420
 taaagaacag ctttctgngg atgcctttcc atatgctggg cattcataaa gntctattca 480
 gtatgagttt tctggaagat gncagaagga ttcncttacc gagttctctt tatatatgan 540
 ggntctatcn 550

<210> 8816

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8816

acacttgggt tttaggtatt tatttcaaaa gttcttacta atacaattgc ttttaaaatg 60
 tagcaaagag tcatttacta ctctcagaag tggcacatac atggcataga aaacaatcta 120
 tagtcagtta actattaaaa cagaaacttg aaatttaagt gacaaacgtt tgtagcactc 180
 cctaaagaaa taggaaataa aaatgcattt atccatatga acttgattat tctgaattac 240
 tgactataaa aaggctattg tgaaagatat cacactttga aacagcaa at gaattttcaa 300
 ttttacattt aattataaga ccacaataaa aagtigaaca tgcgcatatc tatgcatttc 360
 acagaagatt agtaaaactg atggcaactt cagaattatt tcatgaaggg tcaaacagtc 420
 ttaccacaa ttttcccatg gtcttatect tcaaaataaa attccacaca ctatcaaact 480
 aaatcaagat ttgctagtgg ataaaattac cattaatata ccgactctnt ntggaacagc 540
 tccaacatct ggttttgcaa 560

<210> 8817

<211> 484

<212> DNA

<213> Homo sapiens

<400> 8817

catgctaagg aattctttta ctgtgcgctt ccctgaatag atacgccgtc aaacaaggca 60
gaagctacaa ataaagctta cttctactga actcatgaag ctgttcctag tgtcagtttt 120
gagtttcaag tgaagactga atgtcaactg caggctttcc gaattcctcg accatgtcca 180
tccatggatt ctcttcttgt ctagatttcc aagcatgaag atgctaacta aagcatttct 240
caatggggaa cacgaaaaga tttctattat tgtgggttct ccggtgttcc taaaggctga 300
gttataacta aaggatttca acctatttgt gagtttgatg gtaacgctgg aaaaatgctt 360
gaagttgtta ctttgctcat tataggagta tggtttccct ccagganggt ttctctaaaa 420
ttaagagcta ttctacaaca gagaccctn tacacttaag gnatttatgg ganncngcct 480
ntna 484

<210> 8818

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8818

ctttatacag ttcactttta atcattcatc caaaaaacag tttcttccca tttaaaatgc 60
ctattcatac atttgagtta ttccctttgg attatcgga gccagattac aaaatttagg 120
aaatgctacc aagtcctctt tgaagcaaca ggcacataaa taatttaaaa ctctggaaac 180
aatttttaga accttaatgt gaaaaataga ctttttttta atgcatactc atttctgtca 240
aaggctaggc taaaagcttt ttgagggtca cactgcgtat accccttct catatgatgg 300
gtagttttgt ggacacagta aagagttaac ccagcttctt cggggacacc aggtcactct 360
ttctggacac ctgccatcag ttgccatgcc taacaaaccc ttccctggaa gcagttagaa 420
cataccttga gagtttagatc catcttggga gtccagactc atactacctt ttggccttgg 480
aagtcceaaa tgaaagtaat tgggcccgat gatgggcncg atattcatat tggccacttc 540
gtccttttga taactttt 558

<210> 8819

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8819

```

gngtgtcatc ctcagaccag ccatttgcct nttccaaaaa gctggggcta agcatgtggg   60
tggttcaaga ggggcagccc ccaggcccca ggctggggccg cggtaccagt ggcaggtccc  120
cctgggtctc aggagcitan cttctacgga gctcaggtgt catttatggg gttgccagag  180
caagctgtta aagggcgaat ttgtaagac tgagctcana nacctggtgg gagggcaagg  240
actggcgggc acagcaggag gagattagag gaggggccac ctgaatcttt gcagcaggca  300
canagcttct ggctgcatct canaaggggg cagacgcaca ggccaggga cagggggctc  360
taggctgtgg ctccgagtgt ccctggtgac tggaaagcct gaagggaagc tggaaactga  420
tacnggatgc ccgtggcttt gtgaaacana atgagctctt tcttntgaa aaagggcccn  480
aaggggaaaa aaaaaaaccc gacnntaca ctgggtcctt cattcctggc ccgngggana  540
natt                                                                    544

```

<210> 8820

<211> 561

<212> DNA

<213> Homo sapiens

<400> 8820

```

cgcatgtgga tgacctggtg gcaactgggac agagagccag gtcacacggc ctntcccacc   60
aacccccagn ggtgccaaagt caaatattt gttttttaaa cacaaacttc agtgggaggg  120
gaaggagaa cggaaccca cacccttag gcacctgcca tcggttgtcc tttggaggaa  180
gccacctccc ctctgcccg aggagaggct gntaggcagc tccccaaggc tgactccagc  240
cctttcggag gcccccatc aggaggcctt ggaaaagccg ccctgcattt gggcctgacg  300
taacgcacgc ggggtccaggg ctgctgagca gacagctgag gaccggntc cagccctgcc  360
cttgtggctg ctggtcctgg gacctgcgg gtctacctct gcatgtgtgc acacaaggag  420
tggggatgaa cagcgtgctg ggttggtggg aggattcaac aagaaagtgt ccaagtgggt  480

```

gcctggncctg gngcccaatc ccccgaaacc antttgcccn gtgaggnggn ccctgtccnt 540
tgaccatttg ccggggccgg g 561

<210> 8821

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8821

gcaataaaag cacagattta ttgaagcaaa agtatattcc acagagnggg agcaggctaa 60
agcaagctgc tcaagagccc cagttgcaaa atctgggggtt taagtaccct ttaggggttt 120
cctattgggtt acaccctatg cgccaccaat cggaggccga agtgaaggct ccagtcctcc 180
anactcttat tctcctagct caaagaaatc cactgatttc ctctgtagca tcttcaggtt 240
ccatcttgac aacttcctct aaatccccag gggaanagtt gtttanagac tcctggatgc 300
cctgaggggag cggntccana gcttgccctc cctcctctgn tttcacaacg gtccagcgat 360
aggcactgtt ctntgacaat ccttcttggc actgtttatc gactggtgga ggccctgggc 420
tatgttccac tttggggaaa acagtancag anagaggaga atagntcctg gggctctaata 480
tngggtctan gncctgaaag gcattttccc attagcccca gacaagcaat ggcccn 536

<210> 8822

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8822

canggaactt aaagagatta tatttcaaca aattaagtcc tcatttgtat gcaaaattat 60
tcttccaatc ctctcattac tgacagatga tgagtcaatg acctttaaac aaggactctg 120
cgctaggacc ctaaactgta tgtaaagggt ttagtaggtt cagtacattc tttgtggttt 180
tatataattg ctttgcaatt gattaaattg ctttctttta aaggaatata ttaaaattcc 240

tttaaaaaaa aagcaacatt ttttgaaaga agggatatgc agctataatt tcttaaatat 300
gcataaaatg aacatatgtc aaaatcggaa atgctggcta ttcttgact cctaacatag 360
gaaaatgggtt tttaaaaaat taaagaaaaa agccaaacat ccttaactta agaaacttaa 420
ggagttttca caattcctaa gtcaatattc ctgactaaga gccttgacta tgaagaggca 480
ggaatntaaa gaacctcaat aaaataaatn cngtaaaaac caaaccaaaa cttgggatat 540
agaatcttaa atctttgggtt ttc 563

<210> 8823

<211> 490

<212> DNA

<213> Homo sapiens

<400> 8823

catataaacc acagaatata tttaattcaa attaaacatg aaactagaat aatgttcggt 60
ccttatcaag tagcaattac attgtttaaa aaaaaaaaaa agaacagtac atttctgtct 120
acattccgac aatccaacga ggcgcatgg gtcacatcca gtttgatgag gtgacagacc 180
cagcagtcac catccatggg catggttctg aggggactgg ggagacacag accatacatg 240
atacaaaatg attctgcagc aagtctgaag gagcgcagcc tccctcctaa tacataagaa 300
tgaacgtcca ggtagcagag agtaggcgac ttgcataatg agcgcathtt attaaataga 360
tagttaacgc actgcttctt actcattcca agttgctgta ggtgctgccc gnattaacag 420
cagggacaaa agcttcctat gcgcgtttca gcnggaatac tntntccact ccaggcnactt 480
nttgntttgg 490

<210> 8824

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8824

gagacagagt cttgccctgt tgcccaggct ggagtgcagn ggcgcgatct ccgctcactg 60
 caagctccac ctcccgggtt cacgccattc tcctacctca gcctntcgag tagctaggac 120
 tacaggngcc caccactaca cccggctaata tttttgtatg tttagtanan acgggggttc 180
 accatgttag ccaggatggt ctcgatctcc aggatcagtt tcttgagtct tttctctttt 240
 gcctcttagt canaatccta agaacataac caggaaacaa atgaggcaag caagatcctg 300
 ctataaatca aagaactact agactcatga aataatttta aatgcgtgtt aaccatgagt 360
 gaaaactaga aattgacagc cccaattttt ttttaagggc anatggtact ttacatcttg 420
 ggncttaggc ataaaactat ctggaacaaa aggctangga tcgagtcatt ataaaggcac 480
 tttatgccta aagatttcaa acttggagct ttttaaggga attgggggttc acttanttaa 540
 acaccagtng gaat 554

<210> 8825

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8825

atattttagt gcacaattta ttttaaaatc cacacaagaa acccagaaat gcagcattat 60
 cttcagacat cacattctag ctctgtttta ataccacata tgctaaaaac cgacgccagg 120
 acattctcta aatgagttac aaatcagttt ctggaaagga agtgctccat gaaaagctta 180
 tagcaagata actcaggctt tcagggtggcg tatggcacgt gaattagcct tacagtaatt 240
 gtgtacatag tatgttttagt cattattgaa tcaaaagtgt caggaagtac cttttttaat 300
 gcatacgctg agagaaccgt caatatgcct ttgttctctg tgagggatct gccattctgg 360
 aggtacaaat actgcagata gaatatcacc gcaggactac gtcaagttca gagtgttcag 420
 gatcatttct atataaaact acaattagct gaactatggc aaaggtcctt gaacataaag 480
 ctttcttcat tcattggatc ttaataagtn gaaggcncta ccggaaagct gnttaaagga 540
 ttttaattnca tccagttttg att 563

<210> 8826

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8826

```
ccattacagn gcacatttat tgactctgtg tatcttcaca gtgtgatctt caccacagct   60
tgcaaagngt aaccactcag caccttctgc ttccttctgt tcagtttttc cactgcaatt  120
cttccagcat aatcttctga tagccagtgt atgactttgg ctttgacttg tttctacaca  180
gnggggtccag tcatttatct ctggaacttg atcagtcctt ttccaggtat ataagcaaata  240
ctttccacac tccaatccta ctgcaaccac gtatcgttga gaagggtgga gcactgggca  300
gacgctgaca gctgtcacag cccacccac gtccaggact gaggagcagg ggccaatgtt  360
gtgtcaata cagtcacag tggagtcgca ctaccccag acaaccacct tttgtctcg   420
actcccagtg aagaaatact tgctgtcagg actccaatca caagacaaa taattctact   480
gngcacagaa gtaatttggg gggtgaaggc aaaaagacta aaaactggct tgaactaggn   540
gaaaatggga tcccggtttt tccaaagn                                     568
```

<210> 8827

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8827

```
ccagttaaat tcagttttat tgttttccgt tacatgttca ctccctgttc cttctcgccg   60
cctgggtctgg tgggggcata ggagaggag ggaggactga aggtcataca tttctgataa  120
tgtcgctttc taaagggtcg tgacattttt gtacatcttt tccatctttt agtagcaagt  180
ggttgctgca gaccagaagt gaaccaaata aagactcctg ctctgtgcag ctctcagact  240
cctgctctgt gcagctctca caaagatcac agctgctttt gtacattcca gtaactgcat  300
gacacaaaac ggtacctgtg agcaggaaac acattcacac catgagacat gcacagaggc  360
agggtgccct gagcgaagtt gtgcagagat ctaggcctag gggcagtcag ctccctgccg  420
```


aacacaacct agaaaaccaa ggcgagaacg gccccttgcc ttnacancg agggcanang 480
gcaaaagccc tttcctgnga attccaggag gattcancca agggtaaaag ccccgggtct 540
ganaaaatcg aatc 554

<210> 8828

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8828

gaaatgtaaa actcagttaa atttcaagtt tgtatagaga atgtatgcca cagtttgtat 60
tttataaacn caacctatct tattataaat ncaaaataag aaaaagngat ncgttagctg 120
ttatgaaggg ngaaaacatt atataaacct caaaaggctg ctttctgcat ctgcatctat 180
gtaatttcat ggttctntac caatttcatt tacagaaata atctctatag tcaaattatt 240
gntcactttc atgcccacac atgggaagng gtaggngaata atctgtagga atncaattta 300
ttggctgctc ctccactcan aagtagccct gngtctgtcc agtctacact canaactttg 360
ncttcatgag cagccagatc atagagagga gccttacaac ttcttgtatc ccacagctta 420
acaatgttat ctaaagatcc tgaaatcagc tgctgttcat gggtagggag accattttac 480
tgggggcacc caccngtntg tgacgttggg gnnagggacc ccaaggaccc atntttngtt 540
ngggac 546

<210> 8829

<211> 498

<212> DNA

<213> Homo sapiens

<400> 8829

cactacttaa tgcatttaatt tccaaccct cattggaatc atcttggtaa catttaagat 60
tctacaacag ttataatgcg acgattcaga ggtgggtctca aagttgttac agtggttaaaa 120

aaattatagt aagcagtata aaattacaat ttattatggg gccaggggga ttcacaacca 180
 tccttaaaaa cattaagagc aaaccacggc caggcatggt ggctcacacc tgtaatccca 240
 gcactttggg aggctgaggt gggcagatca cttgaggtca ggagticaac atgatgaaac 300
 cccgtctcta ctaaataatac aaaaattagc cagtcgatgat gtcgtacacc tgttggtccca 360
 gctactcgga gggctgaggc atgagaatcg cttgaacctg ggaggcggac gttgcagtga 420
 gccaaagatag cgccactgca ctccagcctg ggaaacagag cgagactccg tctnaaaanc 480
 aaancananc anngaaac 498

<210> 8830

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8830

gcagaagcaa tgctaaggat aaaatatacct gactaccttt attgacatga tttgtgttta 60
 ccagctcatt aaaatctatg tttcaaattc cctggatttt cccaagttcc agactggtaa 120
 aaagtatttt tacatacaca tttgatgctc acattacaaa cttaatatct ataaacttga 180
 aacttgtttt gcacaagtct atggctttac tacttttcaa gacaaaagtc acatattaaa 240
 atacaaacta ctcaaaagca aatagttgtc aagaatgtgg ttacaagac agatcttaca 300
 gataatacag actatattat gatttatctg tttgaaaaca gaaagtagtg tattatactg 360
 aattctggta taagggtgcgc aggaaacttt acttacaatc ctttattttc ataaggtaaa 420
 caccaaagta tttctcacat atattaccac cagatttttt ttaaaccaaa tttccggttt 480
 aaaaatcaca cactggccaa cacagnaatt cgaaatgcta ggaaaaggct agcatntgaa 540
 ggaaaacctg gcttaagcnt tctaa 565

<210> 8831

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8831

aaacataccc	tttattaaca	tctaggtaat	atctgtaata	ttccttgctc	ctcatcccca	60
agtagctat	tagctgtcca	tccttctggg	tagaagtgtg	tttcgtttt	acttggtgat	120
ttttggatgc	atgctggggg	aggaaagcat	attgtttgtg	gtcaccctgg	cgtgctaagg	180
tatattattc	cccagtaatt	ctctcaaggt	gggcatatgc	aaaacataat	ctctaaattc	240
ttcaatacta	agaaatacct	ttgttttacc	cctaaaatca	aatgccattt	tggctggata	300
taggattcta	ggattaaagc	ctttttccag	cagaactttg	aagacattgc	tccatttact	360
tctagcatcc	agtgtgtcca	gtgataagtc	tgctgtcaac	ctgattcttg	ttccttggtg	420
ggtaatttct	cttctctctc	tagaagccct	taattatttc	tctttatcac	tagaattcca	480
aaatttcacc	aagaagtgtc	taggangcag	tctcttttat	caaattttac	tanggnacct	540
cgacaagcac	tggcaatttn	ag				562

<210> 8832

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8832

atttgagaca	gagtttcact	cattgcccag	gctgggggtgc	aatggcgcaa	ctgtggctca	60
ctgcaacctc	cacctactgg	gttcaagcaa	ttctcctgcc	tcagcctctg	gaggagctgg	120
cattacaggt	gccgccacca	tgcccagcta	atttttgtat	ttttagtaaa	gacagggttc	180
cactatgtcg	gtcaggctga	tctcgaactt	ctgacctcag	gtgatccaac	cgcctcggcc	240
tcccaaagtg	ctgggattac	aggtgtgagc	caccatgccc	agccagcaaa	cagttttaat	300
ttcactgtag	tcttggtcct	ctttgaatgc	agtctctctc	tttttttttg	gggggggggg	360
gacagtctcg	ctctgttggc	caggctggag	tgcaagggtg	tgatcttgac	tcactgcaac	420
ctctgtctcc	cgggctcaag	caattctctc	ctcacctccg	agtagctggg	attacagggg	480
tgtgccactg	ggcctgggta	attttggatt	ttagtanana	tgggggttca	ctatcttggc	540
cagctgggct	tga					553

<210> 8833

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8833

```

aaagttagtt aaatacagtg cctagaagga acagacggcc cagcgcaaca ggtcgaggcc 60
tttgtccttg atgatttttt tttcctctgg ctacgttcag tccgactgag tgcagcgcta 120
tgcataatgta aacatattcg ttaaagccga tcacctttaa ggtcattcgg aaaaaagcgg 180
tccttgtttt cgcggtgtgg gtgtgggtcg taacagcagt ctattcccc cgggaggaag 240
gctcttgggc gttggagagt ccactcggg ttgtgccaca ggacaatgtg ggcagggcgt 300
gagcggctcg gcgggcgcgg ccgggcgtt acctcctgcc gatctcgctc tgccgcagga 360
actggatgtt gttggcgctg tcggccagct cggggtactg ctccaccgag agtacgtagt 420
accgctcgta ccctgcacct tgccggcgct cagcaactgc cgttntcgc ccttcgtcca 480
nagcccgcgc cttcttgccg tcgcgcaccc cttgttgttc gcgcgccaag ccggggcaac 540
cgntgcc 548

```

<210> 8834

<211> 350

<212> DNA

<213> Homo sapiens

<400> 8834

```

aagttgaaca gaacatttta ttctcagca attctatgcg tccaaattaa acatgagatg 60
aatagagact ttattgagaa agcaagagaa aattcctatc aacccaagg aggactcaaa 120
gtgaggctgg aagaggactt agaagagtat gaaagtcctc taagatttta tctaagttgc 180
cttttctggg tgggaaagtt taacctagn gactaaggcc atcacatatg aagaatgttt 240
aagttggagg tggcaacgtg aattgcaaac agggcctgct tcagtactg tgtgcctgta 300

```

gtcccagnta ctcgggagtc tgtntnaggc caggggtgcc agngcncnn

350

<210> 8835

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8835

cccttcaaaa acttttattt gtatcaacag ttcctagctc ttgacttagc ttagagcttt 60
 taaaagagca gacaccttat atatttgaga ttgaaaaagt ttctgctatt aatcagaaat 120
 aatcatttct attttctggc ttacccttg gaataagcca aaaataaaac caaagttaca 180
 tttcctgaca gatggctaag aaaacaatag aaggaacatc ctgaattcta gagttgactc 240
 ttgctggtga agtacacctt cagcttagtc cattctccta agtaaagcct gaaggaaaac 300
 tcttaacacc taattctttg tggaaaaatg atcaactagc catttcacag gctatagaac 360
 aaaagtacaa ttgggcatct ttccttatgt cctgggatca ggggtgctta catttaacat 420
 tgatcaggtg aagaggagag gctgtgccta aggtctgaga aaaggcttgc tctaagcaag 480
 ctgnggtgag gcacaggatg actaggaat ggcaganaac angntggcct actgtcagnn 540

<210> 8836

<211> 526

<212> DNA

<213> Homo sapiens

<400> 8836

gacgcataaa ccaatTTTTT tncctcatcg atgttncaaa ccacttaagg aaatgacatc 60
 attcangaac attgggctac gtgtcatttt gcttaaagtc agtttctaan aacctttcga 120
 tggcatttaa ggacttaact ggagttncaa ttgagtgcct actatgtgtc ttgcacctnt 180
 gaatatttaa cgtnttacct catttaatct tcacaacaac aacttatgta ggnagtagta 240
 taatctngat ttactgaag aggaaacaaa gntaatctg gccacggtca ccttactagt 300

gagtggttgg aacagatatt tgagaacagg caacatggct tcaaaatcta agctcttgcc 360
 taccantaa ctactccctt tcaacgaaag actagtagt tatttgaacc tgaataccct 420
 gaaagtaaca agcaaatttt ataattcctt ttctgttgn cagcatattn canattggca 480
 atgganaaat tctttgtttg ccnccaattt ttagaannaa tggggg 526

<210> 8837

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8837

aagaacaaag ttttgggcaa actagtaatt tatttacaat tgtaatttat aaacagtaac 60
 acaaacatct ttacattaat attatgaaaa atgtcccatg gctgaaatgg gtgaaaaatg 120
 agacttcagt acatttctaa aggggtgcca agaaaaggga aaaaatgcaa ttacaacagt 180
 tttaggggag agttatatca agtaatgcac ctaggtgcaa tttcatgcag atgtcttcaa 240
 ccactcaaac tgtttttatt agatattaga ataaaatttc ccaaattatg ttgcctttta 300
 ttcacttgat ttccataagt aaatcaaaat gactggctgt taacagggtta catctaaata 360
 tttctcccat caaccctta gagataatcc cttacatttt aggacatgtc agattgtggg 420
 tattgcaact tcccaaatgg attttacaaa atactattcc atggccctaa atgtgttcct 480
 ggacttctct taccaaatgg gctaatatgg accattataa attaaatgaa gaacgctgca 540
 aaatccgcag acaatttcaa gacnnttaaa 570

<210> 8838

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8838

actgaaaaac tcagacttta ttcagattaa gtctctctac aaaaagtagg gttctgtccc 60

atgtgtctct gacncattta caaaatacca gttttttaaa attttgggtca aattatgagt 120
 ggttgattta aaaacttttc caagaagaag aaaagcatgg agtcgtaatt taaagaactc 180
 aataaaaact tctatTTTTT attttaaaat aatatacnca gngttatttt cttcaagacc 240
 gtcctgtgga tgtgaaatcc gtcttcgcgt catgtatctc ccatatccag cagttcagcc 300
 atccagctac ctttgggacc ctgctgcacc ttgngtttgc tggggagtca ctggagagtg 360
 catctctgtt cagtttcagg gcacgtctca cacatttgct gntccttatt cattgttgac 420
 acaggggata ggtgatccac tacttgctgt anaatgncct tactttcact aggaggcaga 480
 ttactgaaat agtattgggg gaccagctgc ttaaatagtt ccaggagaag attctgaggn 540
 aatccnggaa gnantggtcn 560

<210> 8839

<211> 515

<212> DNA

<213> Homo sapiens

<400> 8839

catttgaana atatttattg agcacctgtt ataaggggct gagaaccata aaagacacta 60
 ggggtacaga aaggaataat taagacggcc tgctcttgag ctcacagtct agtaaggaag 120
 gtaaacataa acaaatcatt acaatacaac aggaaaagag ctagagcgaa gatatagaac 180
 aattgcacag aggaaagagt aactaattct gcctgaaggt aacaaggaag agatggcact 240
 tgattttgaa gtttaaggat gagtgatatt ttagcacggc agagggcaga gggggcacag 300
 ggcatccag gcagagggaa tagcatgtgc aaaggcactg aggtaaaaac atgagcatgg 360
 ttggttcaga gaatggtgtt gaagggtaca cagaggcggg ctgtaaaggg tcttgtagac 420
 cacactagga agtttgaatt ttatcctgta ggcaatggga aggcttcaag cccacatctc 480
 tccatctggt cacangntnt cntaanagnc tntgt 515

<210> 8840

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8840

```

aagctgagac aatgtatcat agtcctatac acttctgagt aaggattaac taactagggt 60
ttgtatcttg cctaaaccac tcactagctg tgacttttgg caagagatca ggaagctggt 120
cctaatccct aaaatgcgga taatacttgc tttacagaat gtagcagcag tttgcagaga 180
tgaacatgt gcttggcaca ctgtagatgc tcaacaaatg gcatcatatt acttcctaga 240
gtcgggagaa gttgtaaaat gaccagcttt cttatgctta ctcggagtat tattctggcc 300
tttctcataa tggagacagc tttatcgatt tagttgaaga aatgctgaaa attgggggtg 360
aattagacat tatgttttaa agttcaaaga gggccagact tgcgatgac cagaaattag 420
aagaaactag agctttgaga accaggaaaa ggccgattgg aaccaaaaaa gaatgaccag 480
gaaagatcaa atttcctagg aaatgnatat acatgctgat ggcataagga naggcintgc 540
tganaaggat tgggnatgtg aagggtaan 569

```

<210> 8841

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8841

```

aatcaacaca ttcagnggat ttgcacaatg caatagcagc accaaaaatt aattgaattt 60
ccataaacia taaaaaattt aaacgaaaat taaaaaacac ttccatttgc tagagatcct 120
aaagtaagaa atacttagga ataacataa aaaaactgan aatttcacac cttgaaatct 180
acaaacatta accaaaatga ttaaaaacat atatatacaa cccacattga tggtttggaa 240
aaatcaatat tgggtattata taagccaatg ngattcanat tcaacacaat acctataaaa 300
accctattg gtttttgtta aagaaacaaa aagcaggctg ggaaaagtga ctcacgntg 360
ttggccaggc tgatctcaaa ctcatgacct caagngatct atccacctg ggctcctaaa 420
gtgctgggtt tacaggcgtg agccacacgc ctggcccaat cctnttaaca taaacncttt 480
aatgncaatt aatgcttcac cggaangttt taagtcactc aaactcaagc caattctgga 540

```


atggctttct ggcaa

555

<210> 8842

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8842

```

cttggtcctt actctgaact gtaaaattaa gttcataaag gcatttggca aggggtggagg   60
aagcttccat gttactaatg gctagcactg ataagttatt ttcatgtctc ttttaacaatc  120
tgcgaccaca ttctgaatat ttaccaatat tttttaatat taaggcagct gttagtcgga  180
tgtgtttagt tattgggtccc tctttttcat ctgtaaaatc tcgaaagaca aggtttcttg  240
atcctctcct cagagccata agtgcagcac tgggatgatt cacaatggcc ttttgtgctc  300
taggagttga gcttgtgccc cctacagttg gctgcttggg agaagacttc tgacttcctg  360
cttgtcctgg ttcatcttgt tttaatcctg caagtagggc atcctttgaa cagtgcctat  420
cctgcaagtg ggtaataaaa gaaaaccgct gtcgctgaaa aggtcacaa ccttcccaaa  480
gacactgccc tggatatata tcttttcctc catgtcagtt gctgcatggg tagaaacctg  540
tganggtgtc tggaaaccct ttttacna                                         568

```

<210> 8843

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8843

```

catacgattg gtttaatttt tttttcagca ggagaaaaaa gaataaagtt acaagattct   60
tttaatatTT tcacaatgtt aaaactaaaa ctgagctcta ggctatgtgt gtaagtaaAT  120
ctagaacaca aaagggttaa ataagatttt ctcttttaaa gatacaagaa ttttaagcttt  180
ccttacattt aacaaacttc acagaacaga tactgcaggg gaacaagccc cccccccac  240

```

ccccccagc tctaagtcag gaagcgaaca tgggcttcgc tccccaggc cagctcccct 300
 gggctccttc ccatggctgc ctccacgcag caggcagagg agggggcggg gggccctggg 360
 gagggccggg aagggtctgc acagcctctt cgggaccaga gcttggcgga agcctatggg 420
 gggctgcctc actgaggatg gccgtatggt ggcaagggt gtggcttgac agcantggta 480
 aacgtgggc anacctggcc ccttntgcct gggnttgcct anancaagaa anccggtctg 540
 ggt 543

<210> 8844

<211> 485

<212> DNA

<213> Homo sapiens

<400> 8844

ggaactgtat gattatttta ttattttaat gctaaactga acagtgaact gaaatcagag 60
 gagaaagaaa atcaagctag tggctcactc tcaatagtgt cctctaattt tattgatgct 120
 tcagttttca taaagtgcaa taaacaaaat aaatagatga aaaaagcttt gaagatttat 180
 atacagtttt gaggttaaga taaattactg actatattcc tttcagcctt ttaactctgt 240
 gaaagctgta acgtacatta aaagcacatt gaactagggt aaataatgat ctttccccct 300
 tagatcaatc tagtattaag gagtatataa ttatgcaagt tcattctata acacgaggct 360
 agactaaaag gaaaattttt gngctacaga ctaaattccag atncggtcag gtgctgagca 420
 gaattccngg ttcaaaatag gaggnittctg gtncatcatc nggctggggg atgaaaggcn 480
 tancc 485

<210> 8845

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8845

cctttttcaa cttttttgaa aattttattc acattttatta ctagtcacat aatcctcaaa 60
aatctaagtt cacaaatgat catcacatga gccctcttct ccatatacac atttgttagn 120
gngaaaaaac aattttgtac agtatttttag tagttacatg attagcaagc aacagagaag 180
tagtgaaagc tgaagaactc caaatgcatt gctcatagga caaccactca aacacaagca 240
gctaggcaat aaaggaaaat ttcccatcca gtcattgaga aatgctaaag gcattttatg 300
gtgacatgaa tgcttaagtt agtatgcaac ctatagggca aataaaactg ctatataggt 360
tggtaat ttt gcatttaaat attngtagta tgggtctacc atttatctaa catttanta 420
tacataaaat ttttaagtctg ggttctcaaa acggtngctt gggatttngg tatagggggc 480
tggtatctca aagctcattc agtatctttn cttctttcaa anggttaatg ggactggngc 540
aatggttgga a 551

<210> 8846

<211> 693

<212> DNA

<213> Homo sapiens

<400> 8846

caatggcaac acagatttat tgggagaaag acctgcggag agggggtacc agctagtgcc 60
agagccccct tcccgttac aggctggacc agttacagtc ccgggcagga gaggtctggg 120
attgttgatg aaatggggtg ggggcggtgt gtttggctgc tgataatgaa ggaatttagt 180
gcagccaggg gttaggcctg ggacctgcct gacaggatgt ttctcacagc tcaggccctg 240
gtggaatttt ccactctgac cagtttgtaa aatggtaggg gtctgcaaaa tagtgcagtt 300
tgggctaaca ttcttatttc ttactttagt ataaaaagga aaaagggcgt cgttgatcat 360
ctggctgctt cctgctggat aggggcgttg tgattagggc ctgggttctg gagcttccga 420
atggtttcct cgtaggctct ggtattagac gtggcaaagg tgaaatatat tatcaatgtg 480
tttttgcatg cttgcctgga taaaacaatt cagccttttg gaaatgaanc gggatacaag 540
gttaaataatg catggcccaa tcattagtaa caggaagagg aagatcaggg gtcctangaa 600
gggggcaacc cagggtatcc atcttanaag ggatgatcct tgccccagga ntcancgact 660
tgatgncaaa agcttttnaa nccctgtcat gaa 693

<210> 8847

<211> 832

<212> DNA

<213> Homo sapiens

<400> 8847

```

actgaaaact agttttatTT taaaattaag tgcatagcac tcattctaatt ccattgggtgt   60
agacttttagc accatacttg ctatttgcaa ttaatgtcgt aacacagata cattttgggt   120
tgcagtctgt acttgagtag tgtttattta gtggactttg gtaaagccct tcatacatat   180
taatctcttc acagtacaca tttaatgatg gtccagtatt ctcaaaaaaa aaaaaaaaag   240
cctactttta agactaatca ataaattaaa caaaacaaaa ccaaacaat gttccccccac   300
cccccaaagc tagcagttgt gagttgtatt tatattgaaa cctaattgtt taaaaatagt   360
tctggttctc caaccacccc atcccccccc gggtatgcag caatagtaat caattatTTT   420
attctaccct cccaaaagat tattaatcca gtgttcttta gctttttaaa atataaattg   480
ggaaagtgtt attaataagc ttttttaaaa ggcataattct tctataacaa gaatggcata   540
taaaccaatc aataaaagta ttgacaaga cattaagtta ccacaggcac tggctgttgt   600
ttcaagttgg gatctctatc ccaatatctt acattcatag cattattgag gtagttaaaa   660
tactgaaaat tggactccag gttgctgggt tctgaatgng aatgtgaaag gatataattct   720
cttttgagcc tactttncct caaataattc aaggtttctt ggggtaagga acttcccaaa   780
atccaatttg caggccttnt tttaaaaang gaaaaggngn nggatncttt ca           832

```

<210> 8848

<211> 599

<212> DNA

<213> Homo sapiens

<400> 8848

```

gattcttatt tttttaatat aatttatctt gctgagatag caagtcaagt ttataaagaa   60

```

gatgcattta ggaataatcc taaaagataa agcaggttta caaccctgca ccgcgcanaa 120
 accctattaa taggcctttt tttttaata cacatttgta tcttgacctt ttcacttggt 180
 tttctcaaat atttcatttc tgggccccat ccattacagg gttaccagga ggcaaatttt 240
 atctacataa atattcacat gaaaatagta acttacaaaa agaaaaaaaa taaggcagct 300
 tcataacaca attattcttt tacactttta acaatataac ttctcccgtt cagaataaat 360
 atacacccaa tgtatggagc angattcaaa gtggatagtg gcttgggggt gcttaaacag 420
 tgttatcgct tgggacctga agtcctgngg gaagcantgg gtggtctcct tanacatggt 480
 tgggatttng gaaaggtttg tttaccnct cctggaattg ccttggcccc tgcacnccgc 540
 ttctgaant ttcggaacaa ccaaacgctt cnntaaaagt caaatcaaaa cctccctnc 599

<210> 8849

<211> 600

<212> DNA

<213> Homo sapiens

<400> 8849

cgctcttccg ctcatgttga ngggaacttg aaaaacagct ctttccctg tatctctccc 60
 cacagaacct tccanaagaa taaaggggtc aaaaaaaaaac tggcctgana ntgctgancg 120
 catcttcttc ctctgtatg tggttgggggt gctgtgcacc caattcgtct ttgcaggaat 180
 ctggatgtng gcagcgtgca antctgacgc ancccctgga nangctgcac cccatggcag 240
 gcggcctaaa ctgtaaaggg gcagggcctg ggctgcacac cttangatna aatttgcttt 300
 cccatggctg ggggcgggcc atgacagggc ctctggatta anccaccctg agctctccct 360
 ccgctagcac acaancacan aacgtgaaat aaacccatct ccagtgaag tgtgcctcaa 420
 gggtcagtct tcaatctcnt cctaaataag ttgggncccta tttttgctt ccaaccccca 480
 ttttgctcct taactttccc cattgtcctg ttcccanc caccaggcang cagcctaatt 540
 ngtccttctg caaccacaaa tgccttggcc tggggccaaa aagcnctaaa ggtggggaac 600

<210> 8850

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8850

```
cagattcaca agctttaatc attacttttt ctgttataca ttgaattgtg gatgtccttt 60
aattagtaaa acagccacta aaattgtttt tatggtttgc tatcacaaaa gtcgaaggat 120
tgctagaatg ctgtttacct gtttcaacag ctcccatcaa ctaccgctac tcactttaca 180
tagaaataaa aacagctact attcattgag cctattttcta tatgggaatc ttagtgtcct 240
cacacacatt aattcactca attctcccca aactctatga ggtaaactat tatgcccatt 300
ttagactcaa atgtcaaaac catatatgca ttttgttcca ctgaccccaa gtggtaactg 360
tgagtagtag ttctaacaat gaggcatttt ttaaaaagtc ctattaatgt ttacctataa 420
tttaacctat aagggataaa cccatacccc cattgaacat ggtacttttt tccatttatt 480
gtctaatatg tggcaacagt aaatgaacaa tctcatcctt aaaacagggtg ttatgacttt 540
tacntntgac aaacccccga attaattcna aactctcnaa cctgccn 587
```

<210> 8851

<211> 591

<212> DNA

<213> Homo sapiens

<400> 8851

```
acttttcta atttttatatt ttttagcacca aaagganaaa acatattgtt acaangctgg 60
ttatagtgtc tcaatggaca ctgcaaagaa ctacataaaa gaagtctgtc tcaagcagtt 120
cgtatttgag tcagtgggtc gatggggcag ttgcgctcag ctgcagtcct tgactccgga 180
aacactgtgc ctctcaaatg atctagagct catccttggc gtacatgagg ggcagttgtt 240
gttctagtac ccatttagcc catggctctt caagccaatt cacactggga aaaacacacc 300
ctcacaagat gcctatccat ttgagttcat acaggtttta gtagctagaa ctaaaaaaca 360
tttttaaaat tatctaaaca aattgggtacc aaagaaaact tgccatactt aaacagtata 420
tatgttcctt tttttggctg aaaaattcaa gtttgtgcta tataaaacac taacagttac 480
```

taaagactag gaaaatttgc agganaaagn tattttaaac ttcccaataa tcctaaagga 540
agccaattat aaaactcnaa taatgccnta cttacttata ccnctntttt t 591

<210> 8852

<211> 599

<212> DNA

<213> Homo sapiens

<400> 8852

ggcaccttaa ttaacaattc atagaatggg tcacttcagg ccactcaaga gtaccagtga 60
acactcccc acaaacacac cctgccacaa gacatttagc acagagggaac agatccatgg 120
ccactgcctc tgcagtatca aanagaatta gtctttccac aaaacagatt ttaacagcca 180
atctctggat ttctgtagtg gctttagtca ggcatattta tcatcatatt agcagtgttc 240
agttcctgcc caacatcttt atttaatccc aattcaatgc ttatggatgc tcagctcatg 300
tttaatgttg caagcccat cttagcccat ctttaattcaa acagaaaaga aacaaaacaa 360
aacaaaaaca aaaaagggtac ctgcctggtt catggatccc tagccatcca gggaccaaat 420
tccaaattag gatgacaaag antttccctt agttcaaaat gacatgtgtt ccagtcctaa 480
tcccagatgt taatctancc atagtgtccc tgagccttaa tccatgtgtt taccacatac 540
ttccccctag ctttaaaatn actccccaag ctgaanaaag gnaaacaacc ataacccaa 599

<210> 8853

<211> 604

<212> DNA

<213> Homo sapiens

<400> 8853

ccaggctgtc ttgcctttat tcctggtttag ggcagggtgtt cctanacagc agtttccagt 60
aaaagctgaa caaaanacta cttggtactc tcttcttggt gtacatggct gtgtcctgca 120
ctgtgcccc tccgcctgg gacanaaacg ggcatccang gtgctgaaac ccgggcaggg 180

aggctactgt ggagaccagg cancagtgt gtgggccccca agcagctgtg actgccctgg 240
 cttgaccagc acaggggttg gcctgggttg gcctaacttt ggcttgagtg tccagggtca 300
 tccgtggctc ccgaactgtg gcccctgcag ggtgcaggan gcancaccga ngttcccgta 360
 cagcactgac ttgaaggaat aaccgtgggc tggggctaca cntgtctggt gcttgcccaa 420
 ggggatcttg gctctccaaa aatcntcttc acctgggcag gtgccaaagc ccccancccc 480
 acggccacca acacaaccgt catcctccgt actgttnanc caaaaccncc gttgaaccaa 540
 aaccnccng aaccaccaac aaaaccgtca tcccccenta cntttaacca aaacccctt 600
 aacc 604

<210> 8854

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8854

aaaanaatgc taggtgttct tcccctacca tctcatatag gggaataaac taatttccta 60
 ctaagttatt acttcttcat agaaaactta gagcattagg ggaaaaaagg tcaatagtgc 120
 tgtacctttt attaatttta attgcataat cccaactttc aaatttaaaa agctcanaaa 180
 aaattcctga gcagttaagt tgctttataa tctaattgtt ggggaanaan ttcttgtttc 240
 taggctaate ataaaaaac tggtaatggt taacacttga aanatcactt actatgtgcc 300
 aggcaactgt ctttacctgt attaattcat ttaattctta caaccacaaa tgaaccctac 360
 attcctgttt cacaaaagaa nggcctggtc ttaaatecca tctaatacta aaatctgtgc 420
 tcttaaccac agtggtgtat tgcctaaacg tctttgttct cgtgatttca agggataaaa 480
 tatancagtt tatatttcta ctaaatttcn ccctacacaa atatntcccc aatctactaa 540
 ataccatctc tataacaaat ctttgttnn ttagggccat tteccna 587

<210> 8855

<211> 592

<212> DNA

<213> Homo sapiens

<400> 8855

```

gagatggagt cttgctctgt tgcccaagct ggagtacagt ggcgcaatct tggctcactg   60
caacctctgc ctcccaggct caaacaattc ttatgcctca gcctccaag tagctgggat  120
tacaggcacg cggcaccaca cccagctgat ttttctatit ttagtanana tgggggtttca  180
ccacgttggg caggatgggc tcgatctcct gacctcatga tccgcccacc ttggcctccc  240
aaagtgcctg gattacaagt gtgagccacc acgccccgcc tagaactctt atagagaatg  300
aanaatgcgt tttgattttc ttttttgc atccaanaca ttgcactcaa gtttctgaat  360
cggcctatta aggttgggtg aaaagtaata ntggctttgc cattaaaaat taaaaatggc  420
aaaaaccacn attagttttt gcaccaacct aacatttagg aaaatggana ntcccccaa  480
aggtgggaaa ttcctgtctt ttncatttat gctgtctatg gtcancacta aaacaacagt  540
gccaccagca ggtgctcacc atccggtatt tgttgggtna atcaaggaat aa          592

```

<210> 8856

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8856

```

aaaaaacgt gatctggctg tcgcccacac tggagtgcag tggggcgacc atggctcact   60
gcagcctcaa attcctgggc gcaggcaatc ctctgacctt agcttctga atagctgaaa  120
ccacagacac atactatcat gtcagctac ttttacttct ttctaaaggt ctactctgc  180
tgcccaggct ggtctcgaaa ttctagccac aagcaatcct ccagcctgag cctcccaagg  240
tcctgggatt tataggcgtg agtcaccaca cctggcaaaa agcaactttt tgtatatgct  300
taccagctaa taacatcttg tcatgcttaa atatctatag tttcttttat cataaaacaa  360
atcacaattt tatcatgaaa acaaaccaca aacaaatata agactacgtt ataaaagtga  420
atgtgactct tcaaactgca gattccacct gctctgccgg acctggacac acacttctcn  480
caaagggagc catgaaatct gtgcttccaa atcactgggc taagcaacct tcactcctac  540

```

tcacaaatgc caagaaaata aaatg

565

<210> 8857

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8857

cattagaaag tcttatttat ttattacaaa agcaaagctt cattcacaat atgaactgca 60
tactagatat agttatttct gcattaaact gctttccgga atccctaaac aatatagtgt 120
attgtacaac cataatgcaa gttatgtttt gcatacaaaa tatgttcttt acatcaaagc 180
acatgttaac aaaaacaagt tctagaaagc atataccctc taagactaat gaaaacgtct 240
ttagcaggga attaaaaaaa aattaacatt catttgataa atattttgta gaacttgaaa 300
tgaggatttt atctctgagt attttttgta gtattccctt tgtccagttt ttgcagaaga 360
atggcaaaca cttattttcta aaatgaaata gccctggaaa caccagtggt aattttttca 420
aagtaaattgt ctagccttaa cttagaagttc aagaagttgt agctacatac tacattagta 480
aaatctgaaa taaaattatn ccngtttaa cccctcnca gttcctaaaa aaatnttatn 540
ggananaatt ttct 554

<210> 8858

<211> 594

<212> DNA

<213> Homo sapiens

<400> 8858

cccaaggcaa aattttattt tttcaagtta caaaaatagg agcatgtcaa aaatacagtc 60
tagtccttat acgagtagtt ccagccattt aaaagttata cagagtttgg gaaaaagcag 120
tttatataca agtcttaaaa cacaacaatc atgaacaatg cacaccgttc aatgtagtta 180
ttgctagtta tatgcagctt ttagttacca ttgttcttct ctgtaaggga aaggacagca 240

tttggacatt ctgattgttg ctgctgaagc tgtggttttg gaaaatcaat ccaaaataag 300
aataagctca ctatgagtag aataaaacgt gtaagtttca atcagtacta caagaaagca 360
tggttttaat ttgagttcca tacaattcta cataactcta tttgttact ataacanaaa 420
tacagtgtnt agttttgggc aanaattaat gaattactgg tttataatt aantgaaaan 480
aacagttttt ggtgccatgt taaaacnaaa ctgnatttct ancttacaac cttaaaaatg 540
gaaaaatttt atgtttaanc aaaaccgaac ccaggtnnta ccttaaaatt aaaa 594

<210> 8859

<211> 379

<212> DNA

<213> Homo sapiens

<400> 8859

acttcaggtt tctcttttaa taancaaaac atccaaggta naattccaaa gtacaaaatc 60
aaccnggtct gaactgattg gtgatnagag cactcagatc agtccttctt taaagaaaca 120
gtttcctccc tgatgccctc tttggtcact ntgnnaatcc gggagtgcgt cccnngtgta 180
canatctctc tcagccgcag aaatgaagac atctttcacc acccgcatgg ctctgtccaa 240
ggacagcgga acatgctcca cattctgggt gttcttataaa ccaaccnggt tgtcaancac 300
gggctgtanc atggcacttg ctgancctcc agccttgaag gantctctct ggtaanacct 360
actggatcta agcngtgta 379

<210> 8860

<211> 601

<212> DNA

<213> Homo sapiens

<400> 8860

ccttgcaccc tctaatttca gattggatcat tttgttaaaa caatganaag tgttattgtc 60
attatactgc cattctataa actcactgat acaatctgcc cgggattcct gttctttggc 120

caatcgaact ctcttgatca tcgcctcaat ttcattctcta gcctgcatca catctctgct 180
aattcccaaa accttaatca aaggtctctt atgggtccagg gaaatgttaa tatttaactt 240
cttctgcagc tcattcaact cctgatactc cttttcatca aagtctttga tgcactcatc 300
ttcactgggtg taaggacact gttctttttc aatcagggtct ttagaccagg agatagcgta 360
ttccacacac gtgacatttt caccacacac ccgaaaagtt gctgattctg ttttcttttc 420
caaaacccaaa tgattctttt ttggtgggaga ttgctttgaa aagcccaaaa atgatgcaag 480
tttagacatc acagactgtt gggaaaaaan ctgaatccct ccccttcctc cagttgggna 540
tnaaaccatc cattacttga aggcgaaaaan anaaaaactt taactttttn caanaaatgg 600
g 601

<210> 8861

<211> 613

<212> DNA

<213> Homo sapiens

<400> 8861

gggtgttaaat acattttattg taaactttan acacaaaaat aagtctctta ggccattcac 60
atgcacatta aaaccaacag gtgcaaaacta caacaatgca tataattata caaatgatgc 120
cactctgtga tgtttacagg attgctgtcc atgcaagggtg atcataggca ttatttatga 180
agccttaaga tccagaagtg ttgttactac caaacctctg attaacactg tgaagtaagt 240
gttttggaag gcagttccat gagttggcta acatttcttt aaagcaaatg actgcttcta 300
agcttagccg tacaagagat ttggttgaa ctgaaaatat tagtatttca ttactgtgtg 360
cagctctgtg atggacaagc aagttgttgg cacatccacc aaaaacaatt acttctcctt 420
catcgtggc acaagctgtg tgccataacc ttggtttttc ggtatatgga tgattaaatt 480
gtatcccatt ccattttttac tgatgccagt aagttcccag gcactnactt aatggctgtt 540
ttannantgg ttaaattccc ccanaaaaaa aaaaaaaaaat cgnaaaaaac nggggtttat 600
tgaattgccaa aaa 613

<210> 8862

<211> 160

<212> DNA

<213> Homo sapiens

<400> 8862

```
ggcgggggga ggggggaaca gagcctcgct ccgtcatcca ggctgcagtg cagtggcgtg   60
atgtcggctc actgcaacct ctgcctcctg ggttcatgca gttctcctgc ctacagcctcn  120
cgagtaacta gnactacang catgcncnan cattccccacn                          160
```

<210> 8863

<211> 585

<212> DNA

<213> Homo sapiens

<400> 8863

```
gttctctgac aggtttatta gctttcatgt taatggatgt ttttaaacc tgcaaccctc   60
tgtcaacttc tttccacatc aagaggccat ganatacagt aatggcctct taagantcat  120
gccacataaa gatgatgact ttgatgtcct ggcctgcctc ctgtaacaat gtgaggctgt  180
tttgggcaca tgctgtaata acaacaggac tatcacagga acaatgaagc aganaagcag  240
aaggtgccta caaagtttta cctaaatgtc ttgtttgtca ggatggagct gatgcgcca  300
tactggcaga acaattagca cagagtgtt ctgaaaagga ggaagaattc acagagcatc  360
agttatgggt gcaggaagt cgccatctgc caatgggcac canantgtca ctgtactgga  420
aggggaaaaa gaatgggctg gatnaaatcc aagggcctct ctgccatgt tcaaagtcag  480
taactgctct gcctgccggc tcacaatgca tgccnanttt taatnacncc cccccaaaat  540
ggggtnatc ancttactta gtcccncaac ttcaaggaac ggтта                          585
```

<210> 8864

<211> 495

<212> DNA

<213> Homo sapiens

<400> 8864

```
ctgattcaca cgaataactaa cgtttaatcc tgttttcaaa gtccaagatt gaaaacttgc 60
aattaaacac tgagcaagcc acatgtttta gtaatatattc ttaaaaagtc ttaaagaaaa 120
aagtatgata caggacctaa gttttcagtg gcatatatac tattaacaca tgttctgaaa 180
tctggtaggt cacatcagtc ctgaattaac ttttaataat aataataata aaaaaactaa 240
ctgagcttta tactttttct atgccactat agcttttctt cacctcattt tttaaatgtc 300
gatcttcact ttatgccggt ctcagtattc ttccaaaaat cttcgaacag tagtcctaca 360
acgcaaagtt tggggaaaaa tgataattag acaacatgtn taaggccaat ttttatgana 420
aagtgttngn ccagtcacta actggctaata naacatgttt tcatggaatg cttgtntcct 480
ttttaattat caang 495
```

<210> 8865

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8865

```
cttttttgag atggagtctc cctctgtcac caggctggag tgcagtggcg tgatctcggc 60
tcaactgcaac ctccacctcc ctggttcaag cgattctcca gccctcagcct cctgagtagc 120
tgggactgca ggcgtgcact accacgcccc gctaattttt gcagtttttc agtanagacg 180
gggtttcacc atgttggcca ggatgggtctc gaactctcaa cctcataatc cgcctgcctt 240
ggcccccaa agtgctggga ttacaggcgt gagccaccgc acctggcccc gatttttata 300
taactgattg gcactcaata ttacttgctg acagtttctt ctcccttctt aatatgagca 360
ttgtatataa ctggaattaa tattcattct caaagcatat atgctacaaa tggcaaaaaa 420
ttacaaactt gtaaatagcc acctatctca aaaactgtta acttgtggca antaaaaaaa 480
ttacccgctt catttgggtt ttaatccatt tagtcagcac attttcatca ancacctact 540
atntnttngg caagcattgt nanaaa 566
```

<210> 8866

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8866

```
gtggaatgct cacagcctct tcagtgtttt cgatcccaac aaccagcaca taaacatctt   60
tcaatgtatg attaatgtta agcatatttc cttaactgaa aaagaggcta aataatcaca  120
ttggctaaca ttttagcagg taataacccc atgcttgtaa gcactttaca tgaattaact  180
cacttaaagc cagagcaact ctatgaagta ggtacttttt tttatagtca tagagagggt  240
aagtaacttg tccaaagtaa tacagagtat tacctgggaa ctagaatttg aattgagaga  300
gtgttattaa tctgtgcaat taaccactac accatacctc agcaaaaaat atctactgta  360
ttaagcctgg aatagaagac acaatcaata aaatttanca tgagggaagg ggcaagatgg  420
ccgactagag gcagccagat agacagggat gactggccac ttctaaaagt ctccaaaagg  480
aaggccnttg aaanacccaa ccncttctcc atngcattgc tctctcctga cttgggttagg  540
anccncctat taaanacctt cc                                           562
```

<210> 8867

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8867

```
aacaatttaa aatatttttaa atgacaaaac aattaaatga caattaacaa taatgttagc   60
ctataaagct attttctaaa acaatttggt aaggagagta acattgtttt atagttctac  120
aaatctcttt aatgttttagc ttgatagaag gcagctgaat taccatacct gcttctgcat  180
tcaacttgct gcaatacatg ttgtaaaacc tggctccaca caggtagata ttttgaaaaa  240
gaggggtatt taatagcttt ttcagatgat agtgtgcttt tatattatac caaacattga  300
```

tgaagtagtt gaaggatact ggttcttagt caattctcat aaaaattatc tcttaaaact 360
atgacattat tggagcacia taccaaaaac taatcaggtc tctgtaccat ggttcttaca 420
aatttaagat gagccttcta gaagccggag tcatattccc ttactttcct gcccaaagca 480
ccattcctgt ttcctcccca aggttcagct acagggcaaa aaaaaaaat ntccggccnc 540
catgaacttg cttattaaaa atcccgttg gtaaagggtt 579

<210> 8868

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8868

gttgagcagc caaaaagtca tggtttatta tatctgaana aatttcataa ttcaaacaca 60
accaaactgt acattttaca atcacattct atttgtaaac agttaaaagc cactgacttc 120
ttttgcatct taggacacaa acagttagaa tcaaggcaat gatatgatgg caaattctgt 180
actgttaaaa tttttaccct tgtttagtct ctcttctttg actaagcaag cattataata 240
ccatttgtgg gcaaaaaaag gggggaggaa anaaagttaa aaatgggtgta actcgttagt 300
ttgcaacaac attttaaatt ttctttatac aacaaacaac tctgtaagcc caataccttg 360
gttacagtaf gcatagttac tgatttcggc ttttaaggtaac aacagttaaa cattaacaca 420
gtcacgagag ancagaaaca tatggagcca cttgatggga ttacaaaaaa ttattaccta 480
ttgattatta acaaaccacn tcnctcncta ataaaaaaa nanctctgaa acnaaatnt 539

<210> 8869

<211> 511

<212> DNA

<213> Homo sapiens

<400> 8869

gggtgccttt ttgactgaan gcaagctcac agatgaagca gangactgaa gatctcgatc 60

tgaaccattt gccggtgtaa actcatgtct aaaatgcttg ttagaattga gacaggggtca 120
 gtgtttacac acagcccttc attatattta gagataaaac ctatttcttg ttcttgcatt 180
 cacattaagt catgatgtaa gaatataccta cttggttcct tcagagaatt cttgaaaagt 240
 tcgatttaca gaagactgct atcatggatg ttctttaact cctcagancg gcggcagcgc 300
 anggtggcgg gcgantaagc ccatctccca ncagcggcga cagcagcctc ttctgttaca 360
 tctgcttgta cttccaacct gttaaaacag ttaccatgg cacttcctga cagactcccc 420
 gttatactgg ctccagctaa tgccatgggtg ctgggcgttt cactcnagtt gtctccgant 480
 gntccnattc catcnagttg ntccncttg g 511

<210> 8870

<211> 489

<212> DNA

<213> Homo sapiens

<400> 8870

atggaacaag aattcaattt attctctatt tataaaacat ttttttaaag tgccttgggt 60
 atgaaaatct aaatgtctgc ggtgtgatca gtcaggagca cgtaactatc actcttcgca 120
 tcctttggtc actggganat cctttggggg ctgggaggtc cttctgtccc atgctaaagg 180
 aaaagcttca caagggtann agccacanaa ccctcngcaa gaaaggccgg tcaggganaa 240
 tgaatggtac anaaaggaaa ggaaggaaag ggggtggaac acaggtanaa ggcaaggaag 300
 ggatgccgca ctggagaccg atggggacac tctaattgtg caagaaggag gaccttcctt 360
 cttgaatgct gaacacagct agtctgaact tccttggaaa ntccanctgt ttgcccatgc 420
 atanggcaa ctctccctgc aaagcaacaa atgtggcttc tatcnggaan gaaaantatc 480
 catcantgt 489

<210> 8871

<211> 586

<212> DNA

<213> Homo sapiens

<400> 8871

```

aacattcaga agtagagttt aattagctgc taattagcac aggaatcgtg gaacaggtaa   60
ctcaaaattt acattactta gaacaagaaa aaagtcagaa taatgcagtc ttcatttgtg  120
aagcttacia tcttctcaga ttagagtgc cagatctggg aatattttct gttagaaata  180
cagaggaaga taaaagaact tgcagtagac catgccactg aagagtaaac agaaagcaca  240
gagaaagaat ttatagcttt aagtattttc ttcacaagta tatgaaattt atgaatgaga  300
tatggtataa tcataaatac ctgtgcaatg ttatcatgtt ctcgactata aaatggctgt  360
gtattttcat tataagcaag caaaacatgt gacttcagcc tttctcaaga ttttagataa  420
actatattta agctcacatt aaataccata gctagtttta agatacccat ttcctttttt  480
ctaaataaat atgttgttca ggggtttttt gaaattcctg aagtnaaten cncccaagtt  540
ggtgagccat ttttatactt tataccnagg gttaaataa aataac                    586

```

<210> 8872

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8872

```

ccaagacaga gtctcactct gtcaccagg ctggagtgc gtggcacgat ctcagctcac   60
tgcaacttct gcctccagtg ttcaaagat tctcgtgcct tagcttcctg agtagctggg  120
actacaggca tgtaccacca ccccggttaa tttttgtatt tttagtagag acagggtttt  180
gccacgttgg ccaggctggt ctggaacttg tgacctcagg tgatctgccc gccttggcct  240
cccaaagtgc tgggattaca ggcgtgagcc accatgcctg gcccaaagga aattcttata  300
ggcacagtta ttgacctaa tgtcttaaaa ttatcttgct taggtgcgaa ccagaaggaa  360
actaaggcta aaaccaaatt acaaattcaa attccatgat tcaaatttaa aataggagat  420
agccatccaa atgagatgag agaattgatt ctgagagcgg gagagactca tacccttcac  480
atctgggaac tgccangccc anaaganggc ctanctgnac ccaggctttg gcctttccan  540
ggggattttt aa                                                         552

```

<210> 8873

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8873

```
cagtagatca gcacttattt taattactga gatagagtca cacttgacag aagcaagccc 60
tgcggtatat ggcatcatca caccaccggt gggatatttta atcctaaaac tgagacagag 120
tttacttaaa catttaaggc ttgagtttcc tctgtacagt gtggaggtga ttaagaaaat 180
taatcctaac atgaagattt ttcattccagt taaaaaaga aatactttaa aaacgacctg 240
cccttccaaa acatgaagtt aacttggagt ttttctgtga tatgacaaac taggcataat 300
cctatctcgg aattgttgag tagaaaattt atgtactaat actcctgtta aaattcaaca 360
gctttattgt gaaagaatcc agagatctca cactgaaaaa aatactaaca cagctcatat 420
ataaattact tatctataag gaacaattat agaaggaatc taaatggggc aattttaaca 480
aaccaggcaa aatatccent ttcctgaatn taagggactc caagnentgg agtttttagat 540
tnangn 546
```

<210> 8874

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8874

```
ggattttttt gtgctttaat gttcgcagtc acacgaaagt ggcatctcca tcagcactgg 60
ggcggccgcc tcctcatcag ccgacagctg cacgggtcccc gcctctcatc catttgggtct 120
gtttgcaagt tactagatca tacaaaaaat aaccgctaca aattctctgt atctggcata 180
taaaaactga gcaaaaagta tctcttaaag caaacatct cagaaaaaat acaacacagg 240
tttaacttct gcagtacttt gttcatataa aacactagta aaataggctt cttaaaaatt 300
```

aaatagtga ataccaacca aattatatac attgttacag tacaagtga tgaggcaaaa 360
tatccagttc ttagtttccc aggtgggtgg ggggtggcctt cagtgcgtgg cacggagggg 420
gtgacaggaa ggccacgttc cgatgtcaca gtcagcgcan aaagaagctt tgcnacnggc 480
naaccgnttg gaannac 497

<210> 8875

<211> 499

<212> DNA

<213> Homo sapiens

<400> 8875

cctcagtcag atttcacttt atttgtatcg atgataatat taactcttca gatttataaa 60
atgacaaaac ttgataatta cctggaaaca atttattatt aactaggtta accctaaatc 120
catcaagaaa aaccaccta catattcagt gttaaaaaga gacattacga ctagcctggc 180
caatatggca aaaccctgtc tctactaaaa atacaaatit tagcagggtta tagtggtacg 240
tgcctgtaag tcccagctac tcagaggcta aggcaccaga atcgcttgaa tctgggaggc 300
agaggttcaa gcgattcccc cgcctcagcc tcccagtag ctgggatcac aggcattgcaa 360
caccacgctc ggctagtttt ttatatcttt agtagagatg ggggtttcac catgttggcc 420
aggctggtct tgaactcctg cctcatgata cgntagcctn cgctnccaaa gtgctgggat 480
tacngngtg gcccgttnn 499

<210> 8876

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8876

gacaaggctc cattctgtcg ctcatgctgg ggtgcagtgg cgcaatctca gttcactgca 60
gaggttttta ataccatta gtgaaactag aagatcaggc tttagtctca gctggccac 120

tgactttctg tatgaccctc aaccagcccc tgccccctctc tggtttccta tctataaaac 180
 agtaggttta agccagctag gtaatgaggg ccagagaatc ccattaatcc cccaacacac 240
 caggctgaga ggaaagagca gaaagttttc gtgttctggg ctgggggacc ttttgggagg 300
 tctcactccc agcagctcca ctccctcgtc ctctctctcc gagctctggg ccagggtcct 360
 ctcccgagcc ccagccatgg ganaggatct naggggtccc ctctggaagg gctggagcag 420
 ntaaccnggg gtcactcccc cagcggggta ncagggaggg ctcaanggct tgaagtgaca 480
 aggccatggn aacttcgaca cggggcccgg ggacagnccc caaaggtntt ggggnagncct 540
 gggtaact 548

<210> 8877

<211> 544

<212> DNA

<213> Homo sapiens

<400> 8877

gagatttaaa accagattta aaaccatcag ctcccaggag tgtggcctcc tccacctgct 60
 ccccaacttt tctggttcca aaggttcaag ccaggctcaa ctcccactcc tctagtctcc 120
 aaataagcgt agcacggaga gtctgagtga caatccactt taataatcca gcttcagctc 180
 agctgagaac ttccccctctc aggtgcaaag ggatggcaga gaagtctttc caagagggct 240
 caatccacta agagattatg gcttagagaa gggaacagct caaagaagcc cttgaagagg 300
 gtgagggtct ggaggactcc tgtggtgcag gccatctccc ggatagagtg catggccagt 360
 tgggggctgc ctaaattccag caccgccgaa gccagccga gaaccnagat aggtccaatg 420
 gtgggtncac anggggtgtc atttcngacc atgagatcct gcanggggga ccttgctttt 480
 gtnggccctt tttggatcaa gggcctttga ccccgngttt ggaagcttan cgtnccttgn 540
 ctgt 544

<210> 8878

<211> 578

<212> DNA

<213> Homo sapiens

<400> 8878

```
cctgggacag agtttcgctt tcgttgcca ggctggagt caatggcgcg atctcggctc 60
accccaacct ctgcctcccg ggttcaagcg gttctcctgt ctcaggagag ttgtcttaaa 120
ctacaattaa catcagttct gatatcagaa ttatctaagg acaccatctt atacctacct 180
ggtcattaac tgaaatttct ctctatagct tcatcattag acattaaaat tcctcatgct 240
taggctcagt gcatttacat ttcaaagaag acatcctatt tgcattacag aacaagcctt 300
gcacaatttg caagtgcac atctgttttc agatttcttt cctgnctaata attctggggt 360
aacttagctg gaacatcttt gggtaanatg tgctgctggc anggaaacac aagctttttt 420
anggcaatgg ntctcaatt tttccaaaa actccagtat tgnactggca nccnggataa 480
taaaatttct taaagggaat aatngccaaa aaaatatatt tccnggatta cctggttaac 540
caaaaatgga tgatagggtt ttacnctgn ggcaatga 578
```

<210> 8879

<211> 573

<212> DNA

<213> Homo sapiens

<400> 8879

```
gcatagaaca agattttgtt ttcagagttt tcttccttcc cttccccca attgttagca 60
gcttgatgtg tcattctccc cagcagggga gggggtggaa tggcttgggt tgtaaacctc 120
ctccccagc cttcctgtcc cttggagggg cagttcagct gggttctggt tcagggtcag 180
gcaggcagtt aaggctggac ggggtgtgcc cgtaacaatg tgcctcatgg cctgcagctg 240
ctctgggttt gactccagac tccggtcgta cagcttgagt ttcacatctg agggcagcag 300
cgggacgtcc cgaggtgcc aaggaaagag catgggccac agcagccagc cgccctgtca 360
gctccagggc acggtgcttg gactcgcaac ggctggcggt tgaaggtaaa gttcaccttg 420
aaaggtcaac ccatccacaa agcggntcan gangctcatg gaaaagctca acttgacacc 480
ggnccaattc accttgcccc aaaggccctt atttttgaan ggggncctcc gggggggntt 540
```

cccaggacaa aanggccaac aagtgggtccc cct

573

<210> 8880

<211> 352

<212> DNA

<213> Homo sapiens

<400> 8880

ccatcacact gaacaagcat ttattccag ggattcccaa catgtgagca ggggtggaagc 60
ctntgacaag gngggccana acctttggat ttggtttggg ggccaaaatc aactaaggct 120
canagaacat acaaagcctg cgtgaagggtg gtgagctgct cccaccttca caggtnitggg 180
ggtcctaaac ccctggagcc atggtcagtc ctgtgcccaa gcctnttntt ttgcaggccc 240
tgaaactttc actacagntc anacactgnt gcacgggccc gggagggaag ggggtgcttc 300
cgggnaactg ttcacagccc cttaacttan cctccctggn gaccanggca ca 352

<210> 8881

<211> 453

<212> DNA

<213> Homo sapiens

<400> 8881

aataaacata agagtgggtt tattgattac atacaatttt agctatatta atatatatta 60
taaactttta gaattagaaa taagtgactt ttatTTTTTTT accaagaata atctaagtta 120
tggcagcatg ttcaatgaaa ggtaagtccg gcacaatttt tctatatctg tttctcagat 180
aatcaggaac atcatccaag ctttacatta cgataccata atgaccctna gaacacaagt 240
tccattaagt agaaatgaag catcatatgt tttctTTTTTT aggaaagacc cccctttttg 300
ttgtatagac atacccttaa taatcttact ctactgtaca aataactttt caccacaag 360
agctgcctca agtaactttc attttggaaa gctatcaagg cntgagacag agtancaaaa 420
tgccactntg gactttgnat nttggngntt caa 453

<210> 8882

<211> 540

<212> DNA

<213> Homo sapiens

<400> 8882

```

aggttgaatg aatgatttat atgttccatg tttatgtaag cacttaactt ctttaaaaag   60
aaactagttc tttcaaaaag agctctgaat tctgtctctg gttagaaagt gtgaacaatt  120
ctcagaactt gggacatgat ttttcttctc tctcacttct tataagcaga tgcccccttt  180
cagggcattt tcaggttgca caggcagaac taagtgagaa atacggctcc agaggccatt  240
cagtttgtct ggggtccatat gattgtagga gttgggtgtg ttagaattgg tgaacttgac  300
tttaagaaaa tctcttactt tttcttcaac ttcttttagg cctagacttg ttccaagtgt  360
ctcttcctcc aataagacag tcaggactaa ggctacatct ttgaaggccg cgttttcatg  420
gtcacaatat ttgtagaaga tcaaagtaga gcctgagctt ancactgaan ggtgcttata  480
atgagctggg aaagttttga cctttgngan gactggccaa anggatctat ttantggctn  540

```

<210> 8883

<211> 566

<212> DNA

<213> Homo sapiens

<400> 8883

```

cttggcaagc attcatttat tcacataaca taagccagac actatgccag gggctggcga   60
tacagaaatg agtaagacat gatccctggc ccctcccatc cctggaatgt ctactaggaa  120
gaagctgcta gaaaaagaca acatgctact ttaaagccaa gaggggccag tctccattc  180
cagcttggtg cacactgaac acatttgagg cttatgactg gttcttttac ttacaaatat  240
tgttttagaca cattttcaaa tgtcacacca atcaataata ataaggaatg gattttatct  300
atattgacag ttctttcaac cttaagagtg aactgctaca ggtaagattc aatcacattt  360

```


ttcaggagaa agctattgag accaatatgc ttggtttatc taataagggt gggaatgact 420
 tataatggct atttactcca ggcaaagaga aaaatncaac agaacntagg atcttggatt 480
 tcaacgtagt tctctccat gggcatttct ttggccgta aggtcaatgc caactgggcc 540
 cccagtgaac atgtcccccg gncctg 566

<210> 8884

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8884

gaagatcaca ggggctttta taataaaata aacataaaca acactcgaat ctctttataa 60
 atcccagagc acaatgtgcg ttttcttact tccttttcat ggaccccaaa taaagacttt 120
 gacagccaga tatccaagat ccggatcagc cagcttccta aaattctect cttttttttt 180
 aaggggtaga aaactggggg tatcccttgg tgggttagggg ttgcttagag actgtggtag 240
 agatttggtg ttaacaaaaa tgtattttga aagcaggatt tcaattttct tatattgaat 300
 ggcaaagggt ccatgcacct ggctatcttc atttctgaaa tgaatgcttt cattttattc 360
 tctccagcta ctttctccct ttctttcctt tccaccccca ttgcctcctt tcagtggcct 420
 tctttttctc cttattcttt cactccttc tctctcacag caaaatgttc tggaggatgt 480
 nantgntnaa acngntanct cc 502

<210> 8885

<211> 558

<212> DNA

<213> Homo sapiens

<400> 8885

ggagttaaac tgtgctaaat tacagtagtg cttattagta actagatttc aaaagggttac 60
 agaaaattta cattctctac acaaaaactg catctcctgc acagacaaca tcgacatcga 120

cacaggaagg aaactgattg tccattcttt gccaggaag tctcggtact ttatagattc 180
gtctttacct cttttttgtt gttgttcttc cgaaaaagca gtttaaattt ttttcttttt 240
ctttttatgc tagggacgtg gagatgttaa aacgacaaca aaaaatatat ataaaaacag 300
gaatgaaatc tgtgagagaa tatttttggg tctaaagacg ggtgcattcc gtttgtcttc 360
gcccgaatcc cttgctggag accacacgag cagtgcatt gcacggagag gggcagcttt 420
tgggttccgc cgccgtcact gaaaccaccg gaaggcgggt cccgtcggaa gcatnacctt 480
ntncagaaca ncggaaggct tctttttggg ttcttcacat ttctgaattt gcaaactctga 540
tggccagctt tnnatccn 558

<210> 8886

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8886

gagacggagt ttcactcttg ttgccaggc tggagtgcag tggccgtgat ctcggtcac 60
tgcaacctcc gcctctcagg ttcaggatgat tctcctgcct cagcctccca agtagctggg 120
actacaggtg cctgccacca ctccctggcta attttttgta ttttagtag agacgaagtt 180
tcactatatt ggccaggctg ctggtctcga actcctgacc tcgtgatctg cccgcctcgg 240
cctcccaaag tgctgggatt acaggcatga gccaccacgc ccagcccctg caagcagttt 300
ctttaactct gttgggatgc cattcgtggg caaagctaga tttgggacaa gttgccacgc 360
tctgctagga agagtcagtc ctccaggggga aagtttcttt tcaccttcgg gatcccaagg 420
cttntctgggt tgactcaagg atttatcgca ncctggatct ncangaaatn cttttgggcc 480
tcttggctng gccaggttgg ggctnggtg 509

<210> 8887

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8887

```
gcagattaga aaatitttaa tagttgattt gaaatgtatt cattcactca ttacattgng 60
ttgcanaaat acctgtcttt caccatgctt ggttcttcat acttacaata cagtttgtaa 120
gtggagggtta ggagtagctg agcaatctgg tagagagcag catgtggcac acagagttga 180
caaaactgaca gttggaactc ctgactttct ccattgcttc ctcagaagca aaatccttca 240
ccatgtgata taaagtagaa tgaaactcag tttcttcttt aagngcttca naaaatgcct 300
cactctcttc cttgatcttc agtctttgtg ctctgtcacc actaaacatt aaaagggccc 360
aattaggatt ctcagtacat tcttcaataa ggggttccct taccttaaata accacttttg 420
nagaattacn tagtagggtc ccttggttcc anccaatgca aaagccgaac cttattnngg 480
ccatnttgnc gaaaagcctt tacttttacc caagggancc ttattgtttt 530
```

<210> 8888

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8888

```
ctgagacagg gtctcactcc atcactcgct ggagtgcagt ggctcactgc agcctcgacc 60
tcccagactc aagcaatcct cccgccttag cctcctgagc agctgggact atgagtgcac 120
gccagcacat ccagctaatt tttaaatttt aatgtagaga cgaggctctg ctatgttacc 180
caggccagtc tcggactcct gggctcaagc aatcctcctg ctttggcctc ccgaagtgct 240
ggggtgacag gaattaacat ttttgattta acttttgttt tggcagattc caaactaaag 300
acaacatgtt ctgacatcaa gaagtgccca ggccttccct acaggaaga attctgtgga 360
aactatgttc aaagaaaatc aagcctaaga gattacaggt ttcaacagac tggccttcac 420
ttctactagt tcaagaattg aatcctgtgg aaaaggacag ttiantgata tgggggaaat 480
ggaatncncc taaatgaaa agccttntt ggaaaaaatt taaattntaa agtccaaatt 540
cn 542
```

<210> 8889

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8889

```
gtgggtaaga tagtaggtgt atatatttat gggatacttt gatacaggta tgcaatgcat   60
aataatcaca gggtaaaggg ggtatccatc cctcaagca tttattcttt gtgttacaaa  120
caatgcaatt atgctcttta tttttaaatt gaggctggac acggtagctc acccatgtaa  180
ttccagcact ttgggtggct aaggcaagcg tattgcttgt gctcaggagt ttgagaccag  240
cctgggcaat gagacaaaac cccgtctcta caaaaaata caaaaaaatt agcctgggtgt  300
ggtggcacac accccgcggn ccagctact cgggaaggct gangcaggag aatcacccga  360
accaggaag ccggangttg cagtgaacca agatcacgcc attgcattnc ancctgggca  420
acaagcgcga aacttcatct taagaaccaa aaaaaatctt gcaaattctgc caatgcaca  480
tgggtaccct atcttctctt ggttnataag gccctgggac ttcctttgga ata       533
```

<210> 8890

<211> 382

<212> DNA

<213> Homo sapiens

<400> 8890

```
aaatgatatt ttctttatct taaatccaga gaatgattta acttaagaaa aagttctaga   60
catgaaaaaa gaataaaata gttaagggat aagcagaaca caaggcaaaa aataacatca  120
aaacttcaat ggctaatatg aaggctctgt attaaaaaca aaacaacaaa aaacggtaaa  180
attttatcaa gagacataag taaaacgaca aacataacag tccctaaaca ggaagacaca  240
gtgctgttaa aatgacaatt atgtttcagt tatcaattga atgcaatttc aaacaaaaac  300
caagcttagt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt  360
tttttttttt ntntntnnnt nn                               382
```

<210> 8891

<211> 552

<212> DNA

<213> Homo sapiens

<400> 8891

```

gaggagagct tttctacttt attacaaaga gaagaagcct ttatgtggtc agaaaataca   60
agattgatct ttttttctct tcctatgaaa cgctgctgtt caaacagcca gagtgaattg  120
tctcagttca cttcttttaa gtcccatcac attcacttgg gtatggatgt ccttggctgc  180
tgaaaatctg gcccttttag tgcacagggc gacaaagtcc cctgaccagc agttccagaa  240
tgtcccatth tcatatattg catccatgca cacctcctaa aaatgaggta cagcaggggca  300
aacattttcc aaaatagatg tcatatatat aatatataca cattccgtac atacatacct  360
ttattcatgt gatgtccaaa aatttaaaaa aaatgtccac gtttattaca aaatcgtagc  420
aagactggac aggtgggttg ctcatcttgg aaaggatgaa gctcaantaa taccctaaacc  480
ctgggaaaac catccagaga attgnnggca atatctttct ttttaaccag gcaggatatt  540
cttgcattha gt                                         552

```

<210> 8892

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8892

```

aactttatca tttataaagc catacaatgc attgcaaaga aacaaagcag ctgtacagga   60
gtggggacnc gtcagtgtac aatacattca tgtccaggat aaggngcata cncaggatt  120
tatacncggg ggcagcggct ataggcacga tgatacaaaa tataaagtat atttccatct  180
atataaatac ncagaaagcg tgtgttccac gtggttgggg gtggccgaca gtgtaggacg  240
tgtggcatta acagccccgg tgctgccgtg caggagagtct ttcttcttca ccttagcata  300

```

caggctccca tntagnggcc cctgcgtgtg tcccaccacc tntccatgc cgtcatctcg 360
atgcccactg aagttgtcgt aggagtccca gcggatgaag ggggtcanna ggtgttatag 420
tccacaagac acgcttgggc ccgttttcca agngcttcat gccttgaatt ttctttgggc 480
ccttaagaaa aatccaactt ccactttggc catacttttg gga 523

<210> 8893

<211> 471

<212> DNA

<213> Homo sapiens

<400> 8893

gtcgttttat tctataattt ttaattagt acgttaaaca tctttcctat cggccatttt 60
acatattttt tccttatgag ttgccttcac ttatcttcag caaaattatc tattgagata 120
tctttttttt cctgtaattt ggaagtgtc ttgatatgct gaaatgtctg cactgccaca 180
ttttgcccta ttgtttcttc agtttgcggg ttgcttgcag ttgtgcttat ggcgttccact 240
gtatggaagt gttgttgttc catcaaaagc aaatctattg agtctttttt cttcatggct 300
cctgccttcg gtcataaact cttacaggta ctacaatgaa cactcgccac tgttggttacc 360
atggtgcaga tgtcttctgn atccttccag aaaaccattt gaggagtgac cttttgcaaa 420
atgtncann tcttgncaaa gttttccagc tgccaggnaa aaaggtcctn a 471

<210> 8894

<211> 531

<212> DNA

<213> Homo sapiens

<400> 8894

gagatgaagt ttcactcttg ttgccaggc tgaagcacag tggcacgac tcactgcaac 60
ctccgcctcc caggttcaag tgattctccc gttcagcct cctgagtagc tgggattaca 120
ggtgcacgcc accacgcccg gctaattttc gtagtttttag taaagacagg gtttcacat 180

gttgccagg ctggtcttga actcctgacc tcaggtgatc caccgcctt ggcctcccaa 240
 agtgctggga ttacaggcgt gagccactgc acccggccca tggatcagag ttttaattaa 300
 tcatttngt tttgaaaagc ccacagtaga gacctctagt tcagtaaaaa taacttgnnt 360
 tccttttagg attggtacca cagggaaca cagcttttca aagcgcctta cggggaagac 420
 tgagcctgga atcttgacca atttgtnggg caaancctta aggaaccctg gcccaanccn 480
 ccggcccttt naccggaggg cccatttcc ctggttanaa aantttcccc a 531

<210> 8895

<211> 419

<212> DNA

<213> Homo sapiens

<400> 8895

ccaataaagc agtttatttt ctgagagccc gtgccctgtc ccatcccgcc ccacgagccc 60
 atccaggagc cacacaccct gcctgggctg tgagcactat tctcctggtg acacggcgct 120
 cagcccaggg gacctgggac aagagctgct ctgtcctgct tggtggtctt cagaggagag 180
 ccttgggggc tctgagcagc aggtacaccg tcctcccctc ctgccagcct ggttctgccc 240
 tcaactggaag agtnaaccct gccagcagcg cccacagccc cagccccacg tccaggctgc 300
 catgtcccgg cgggcagtgc ccaggcccag ttgtattttt tagcanactg gntgcactat 360
 aaatagnngc angcctgtcc tacctgcatt ttgcaattnt tncgaacngg taatgctgg 419

<210> 8896

<211> 425

<212> DNA

<213> Homo sapiens

<400> 8896

ccctcctgaa caggcattta atagtcttat ttcagttgga agcaatagtt ggaaaataag 60
 ttacaggaac agaccaaaaa aaaaaaatt aaagtgttc aggctgcaaa cgtaaacata 120

aggggcagga ggctacctgg ccctgtcccc aaccctgag acaggaaggt cactgtcagg 180
 ggcccttagc catcaccacc ctctaattct agccctgcgg gagggaggga gggaatgtca 240
 gaggtgggaa agaactcaac gggaatgagg aagagacttt gtaaactcag aaccagggtta 300
 aagggccggg gacaaggag ctctgggaac ccttgccctg gcctaagggg tggggccagc 360
 cccccccaca ggaacttngg ggaaatctgg tggnttannc ccagccatgc ccgnccactt 420
 nanag 425

<210> 8897

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8897

gaaataattc aaaaacttta ttgacctata acctgattag aatatgccag atgggaatca 60
 atattgtaca gaaagtigtc agaatttttt acatagaaaa ctttacatct gtccatatac 120
 attttgtcca tctgaaaaaa ttttctacat ccactgttaa tacggaatgc ttgacaatct 180
 tgtcttttaa ccatcagagc acaattcaca gtatgaatac atttcagta aatctaacct 240
 ccgcaaacca tgccagattt gttatittta tatattcaac gttaaattct gtacatagag 300
 taaaacctac atcaagcccc accacccaaa agaaaagaaa atgacagcaa tctggattca 360
 ttttgcagtg attcaagttt tggccataaa ggatcattct attttaatgg ctcatcttta 420
 aaaggcctaa agagaaattt gtgacangga gntactgnca ntaggatata tttctaacct 480
 ttttttccca atggngnaaa ng 502

<210> 8898

<211> 352

<212> DNA

<213> Homo sapiens

<400> 8898

acagatgagg agcctgaggc atanagaggn ttattaattt gtcaatcaaa aagttccaag 60
 tttcaaagct gggatgaaaa gccaggtnnt ntgacttgca ctntgtcaca ctggattttt 120
 cctctgatcc agctgcagcc tcccataana agttcactnt taatttcag tcccatgctt 180
 tgtcttggtc cctgtgagga aaggggtcag ctaaaggcaa ctgttctata aggatgggta 240
 ggtatcctgg caagatattt cctntgaaat agtaaacgtg accttanaag ttactgtcta 300
 gggcncntnc agctgaataa agtctcccaa ggaaacnctg nggtanagca gt 352

<210> 8899

<211> 467

<212> DNA

<213> Homo sapiens

<400> 8899

aaccaaatat gaaaatgtgt tttatttctc agtacaaagc cagatactgt aaggctatga 60
 aaaactgact agccagaggc cagaaaggac aaaaagaaga ctatctctgg cctgggtgccc 120
 tgtgatctgg cgtgggtgtca caggaggtct ggggacagca gcaaagacct ggaccggtgg 180
 aggtggatga gggaagcgat ctgccagccc ttccagcctc ccgcggctgg ggcctgagga 240
 tcctgcctgc ctttgggggc cactggttgc ctggcctggc tggttccagg aatgaactgg 300
 gagaggacag gaggtgcagg gctagagttg agaatgaaac tagggtgctg ttgcccccaa 360
 aggtaccttc agtccctnta ccacatccan ttagaaagtc ttgacccttg gacaggcana 420
 catggccttg gacttaaagg ctgtangaag gtangcttgt antnaca 467

<210> 8900

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8900

gattttttaa tgagaaaatt tataaaagaa agaaattcat ggtcacaaaa tttaacatt 60

ttaatcctaa acattacagg gtaaatagat actggaccct atctccatac tccataaaat 120
 cctaactttt agtttccatt tcaaatgttg ctgtaaccac taaaacacta gtggttttac 180
 aacctctgga ttatggaaat acacatttct gaaataaatg ctacaaaaac aacaatggaa 240
 gaaagccaaa caaacagtct ccatgaagga aaaaaaagtg gaacattttg aagcttttag 300
 acacttctct ttccatgtct tatgattaac ctgtcaattc agtgcattgt atggtcatat 360
 gtaatgggcc ccatggtgaa caaacatcta actagtgtcc attgattcca agttagtaga 420
 tgatgaatct ttctggatac tttcaaaaga taccgcagc tcangggtag gactggactg 480
 ggactggnat tcctcatcag tggactcttc tctgnttctg gnaagggtag ccatgctggt 540
 accgggct 548

<210> 8901

<211> 533

<212> DNA

<213> Homo sapiens

<400> 8901

caatgcatga atatttgatt ttatttcaaa agacaattat ttataacact gaccctctat 60
 caaaaagaat atgcttttct gatggggaag tgacaaaaaa aaaaactaca cagaacaaga 120
 gtaataaagt tctcaagtaa ggattgcact ccaataggaa ttgagtgatt ctctcagaga 180
 gcactcatta catcttagac aacgtcactc ttctttcctc ttggccatat gttcaggtct 240
 catagtcttt ctgaacacag aatggcagtg gccagcattg tccattatct atgttccgct 300
 tgtttactaa ttaaaaagct ttgggtctca gtgttgtaaa cgcaatttct gccttcgata 360
 tcaaaaagtg agtgaatgag acaagattag ttgaaggaag tacttgatat tttactccag 420
 atagctgaat gaaaatgggt attctccctt ggctttggag gccatcggtt cctactccca 480
 ngnttttaca gaccgggaat taaaangtn acttgcaaat ttttacaagg ngg 533

<210> 8902

<211> 546

<212> DNA

<213> Homo sapiens

<400> 8902

```
gtcctgtact gccaggttgg aataatgacc aaagggaggg gcaaaacaaa cagatatgct 60
cactgtggca gaagtcactc caaagatcaa agacttgatt cagccgtggc tgccaaaatc 120
agaaccacag tgggtgctca tcagcacggt gccctcagaa ccacatgggc tacccttgat 180
aggtagcag cttgggggtgc aggccccgca tcttgcttag aaccacctgc tgagaactgg 240
atgtgcacat taccttacct actcacaaca ttgatttca actcaattct gctctagtat 300
tatgtttatt gaatgacgga agtctaacag acactgtaaa aatccaattt cacatcttat 360
agtacccaaa agggaactgt gattttccta tatcagtgag caaaatcttg agccaattag 420
taacaagatc acccaatttc tagtatttct attgagatat atttcttag gtttctgnaa 480
nggggaaata atttttggna ccttagtata agcaatctta tattcattta taggggtatc 540
tcaagt 546
```

<210> 8903

<211> 545

<212> DNA

<213> Homo sapiens

<400> 8903

```
agtagagaca cggtttcacc gtgttagtca ggatgggtct gatctcctga cctcgtgatc 60
cgctgcctc ggccctccaa agtgctggga ttacaggcgt gagccaccgc gcccggccag 120
ctttatcgtt ttatcagct aagtttttaa aattgaaagt ccccccaaa ggggcagcat 180
atatgtaaat acctatcttt atctacctgt acttccttca ctaatatctt aattatcttt 240
ggtccttcct ttgaaggatg aaaaatttaa agctacatgt ttcgtatctt ctttgggcct 300
tctatcttgt gcctttcttg tttttggtga tttttttaga aaaagatatt taaaatggtc 360
attatcaagt actgtgggct cctaagagg aggaagggan gtaattggna cccaatgggtg 420
acnttanagt ggaaggggaa aaaagctggg ggaaagtggc ttggagacc ttcttcaca 480
nganggccct gtgggccaaa ccactaagct ngggtanaac ctgantcttg atccactggg 540
```

nntgg

545

<210> 8904

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8904

```

cttgagacgg agtccttgctc tgtcaccag gatggagtgc agtggcacga tgtcggctca 60
ctgcaagcta cgcctcctgg gttcatgcca ttctcctgcc tcagcctccg gagtagctgg 120
gactacaggc gcccgccacc gctcccggct aatTTTTTat atTTTtagta gagacggggt 180
ttcactgtgg tctcgatctc ctgacctcgt gatccgcccc cctcggcctc ccaaagtgct 240
gggattacag gcgtgagcca ccacgccag cctaattggc ctatagttct atccatttca 300
gtgtataaca ctgtttgggtg agtgcaattg gataaaaaga aggaggagta tTTaaggtag 360
ggaataaaag agatggcaaa tcattgactt ggtgtggcct tagatagcat taattaatgn 420
ttatctcgac cgTTTgtgga agctcctaataa gggTTTataa aagatttgag gatggccaac 480
TTTTaaatcc atncncaaaa tctttgatac cTTTTntttt aagngggaan ggttnaattt 540
cctggcnt 548
    
```

<210> 8905

<211> 263

<212> DNA

<213> Homo sapiens

<400> 8905

```

caggcatatt agctTTaatg taggtggcca tgagTTTTta ggccaaggaa ggaataatgt 60
nTnatgtacc aaagcctttg gaccattttt ccatcatacg aatagaattc cctgttgcta 120
anccgatgat ncattaccct tttcccatag gtgtgagtgg cggTctgaat ggagaagttc 180
aatagttcng attgcagatc ctatgcanaa gaganaataa ggaaaataac cnnngnctcc 240
    
```

tgattaagc tgaggctggc aaa

263

<210> 8906

<211> 532

<212> DNA

<213> Homo sapiens

<400> 8906

```
aagcactcaa tgtaggcatt ttaatcttct ggataacaga gtatcttttg agaaattaaa 60
atcgaattga ccatttgcaa tatttggttt tcctaataagg tactgtctta gtaaattgttt 120
aaatccaaac aaatcttctg ttcaccggga aaataactaat aaaaatacac tttctaaaaa 180
gaaattaaga aacactaggg aacacctaata gtaacagaaa gtagttcacg tttgttaata 240
aactgtatatt ttaaatagtc ctttgttttt aaatttttaa aacgtgcaga taatgtcatt 300
tggatgaaaa tataaatgaa acatcagttc actcttggct tcacaggttg cacagcttag 360
gttataatgc acacaagttt tataaggcct aatctaaca gggcttgga agtcttacct 420
cagtcagaat gacctttgat ggggttataa cgngttttgg tggtttgncc cctcgttca 480
nggataccat ancaccggtg atagtttcng nattggcagg ttttgggaaa an 532
```

<210> 8907

<211> 343

<212> DNA

<213> Homo sapiens

<400> 8907

```
cataaaacca tgtttattca aaaaaatcta ttcagaaagt ctggaaagcg taataaatat 60
ctgtacagtg gccaccatc tcaaactga attacaaagc aggattgggt gaactgggac 120
tttgtgcaga tcttgctgtg agggctcctg gatcaggctt gaggccacaa agctgaatcc 180
tctaaacagg tctcgatgaa caaccccctg ggaatggagg tagtccatgg tcttggtgat 240
gggtgcacagg gcgtnactgg cttcgcgctc cgagaagaat ctctgccgga ggatncggtc 300
```

caggagctnc ccancacgca tcagctncat taccaggncn caa

343

<210> 8908

<211> 429

<212> DNA

<213> Homo sapiens

<400> 8908

gtgtgtgagt cagggctctgg ctctgccacc caggctggag tgcagtggca ccatcacggc	60
tcactgcagc ctccacctcc cagactcaag ggatactcct gcttccgcct cccaagtagc	120
tggaacata ggtgcatgtc accatgcctg gctcgccctg caattctaag ccctctgttg	180
atggaggtgg gatgggcgca gatccacagc gaccatgaaa tgcccagctt gcaactcaca	240
gtggaaggca ggcaactgcag ggacagctca cggggaagaa ctgacacact ttctgtgacc	300
agtgccctgg acatggcccg gagtcacatt ctaagggggg agggggggcac caaccttcan	360
ggctttcanc accccaaccc caaaagggcc ctggangaag gcccgttatg ggggggnccn	420
gngaggnc	429

<210> 8909

<211> 490

<212> DNA

<213> Homo sapiens

<400> 8909

agtagcacga ttatatttatt atatgcttta taaaaaaca aacacccaaa gacatacaac	60
acaccgccct nacccncag cggccattag ggagggggct tatactnttc ctaatgtaga	120
tctggccatc ttataaagca gaccacatta tttgtttcca tatatactg tagatatattc	180
tctcccctca aatatttata tctcgactaa aaaaaggagg tgcaaagagt atataaagat	240
aaatgagatt ttcttgctgt tggtatagta caaacaccag atgactacca gtggagtaac	300
anggcacaaac aaaaacacaa accccacctt cagtgaggaa tggaaggtct gtttaccgac	360

ctcaagtagc tgaatcacct gctgtaactg ggacctnnct gacaatcatg gggttttag 420
 ggacatgggc ccagtggatg ggctttctac ctngttccan aanggccttat tgnggncctt 480
 acaccccttt 490

<210> 8910

<211> 457

<212> DNA

<213> Homo sapiens

<400> 8910

aaaggcagag tctcactctg tcacgcaggc tggagtgcgg tggcatgac ttggctcact 60
 gcaacctcca ccacatgggt tcaagtgatt cttgtgcctc agcctccaa gtatctggga 120
 ttacaggtgc acaccacat gcatggctaa tttttgtatt ttagtagag atggggtttt 180
 gccattttgc ccaggctggg cctgaactcc tgagctcaag caatccacct gctctggcct 240
 cccaaaatgc tgggattata ggcatgagcc actgtgcccg gcctgtgggc catttttgat 300
 tggcccactc attcccaaag ggcgtgtac ccaggcaaaa tactcatata tgcaactaga 360
 aatactgnct agagtttaca ctcatccta ttcaaaaaaa tttntttta agttcagntg 420
 aaatcattca gggnttcggn ntggcttcta ganggtt 457

<210> 8911

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8911

ggagagacaa ggtcttacta tataggtctt actatattgc ccagacaggt ttcctgggct 60
 caagggatct tctgccttg gcctctcgaa gtgctgggat tacaggtgtg agccgtgtgc 120
 caatgtgcct ggccagtttt taattttttt tttttttga gccggagtct cgctctgtca 180
 cccaggctgg agtgcagtag tgcaatctcg gctcactgca agctccgcct cccaggttca 240

cgctattctc ctgcctcagc ctcccgagta gctaggacta caggtgccca ccaccacgcc 300
 cggctaattt ttgtatattt tagtagagac agggtttcac tgtgttagcc aggatgggcc 360
 ttgaactcct gacctcatgt gatctgccct accttggcct cccaaagtgc tgggattata 420
 ggggtgagcc atcnggcccc gccctttttg attctttacn agaatatgc tgaagataac 480
 ttttttccat gcccttaatt ttngtccctt gtgggcatat tcatttcttc ctgnaaaang 540
 gtaactgnnn a 551

<210> 8912

<211> 486

<212> DNA

<213> Homo sapiens

<400> 8912

gntttgntgn tgntgntgnt ttgnttttgg ttttagaaag cctcacactg taaccggggc 60
 tggagtgcaa tggcatgata ttggctcact gcaacctcca cctcccaggt tcaaacgatt 120
 ctctgcctc agcctcctga gtagctaaga ctacaggtgc catccaccac gcccaactaa 180
 ttttttgat tttttttttt ttagaagaga tagggtttcc ctatgtttac caggttgggc 240
 tcgaactcct cacctcgtga tctgcccacc ttggcctccc aaagtgctgg gattacaggc 300
 gcgagccact gcaactgacc gccctgagct ttntttcctg caactagagg gtctgatctg 360
 tctgcttggt aagaaactgc acaacttcca aaccatcagg gtaaggncgn gtgtgtcgtc 420
 ttgagcattt ncntaaatng taaacatnac acgtaaagtt cacagnccaa attttcctgc 480
 agcttt 486

<210> 8913

<211> 514

<212> DNA

<213> Homo sapiens

<400> 8913

acaagattaa aagaacatat ttcctattat accattggta gnactaggga ttacttggta 60
 tttcacctct tagggncctt atttcaaatt ctaactcgaa acactaggga aaaataactt 120
 attggcacc c tgactctcaa actctcatct ccaccaacaa tgtcttactg tttgtaatca 180
 ccaaaattat ctgttttttc cggggttgaa attgtagaaa gcactcaaaa ttaggatcat 240
 atttcaatgt gtgtaggtga actaactgcc ccaaagacct acttaattaa actacatgcc 300
 cttgtttttt aacaaagcat ctttaagtct cctgggtggg ttaagtgaat ttgataacct 360
 taaaaaagtc ctgtggattg ngtaattttt ttctccactg tagaagggtt aactatttca 420
 ctttcacaga tgnactanat gnatcatgtt accctntaat aaaccattga aaccggatct 480
 ggttccagaa nctggcnagt ancaactggt ctga 514

<210> 8914

<211> 509

<212> DNA

<213> Homo sapiens

<400> 8914

gagatggagt ctcgctctgt cgctcaggct ggagtgcagt ggcgcaatct cggctcactg 60
 caagctctgc ctcccagggt caccatcttc tcctgcctca gcctcccagag cagctgggac 120
 tacaggcgcc tgccacctca cccggccaat tttttgtatt tttagtagag atgggttttc 180
 accacattag ccaggatggt ctcaatctcc tgacctgtg atccgtccac ctcggcctcc 240
 caaagtgtg ggattacagg cgtactgcgc ccgaccatt ttaaccattt ttaagtgtac 300
 aatccagtgg gtatcagtta cattcataat ggctggtaca accaacta ccatctattt 360
 ccaaactttt tcatcatcca aatagaactt ngttcctatt aagaaattaa ctggccaatt 420
 tnccaagcct ttggtaacct nttctttctg ggtincaatga accnggncta tgctaganat 480
 ttcggggtaa atnggaatca caggattgg 509

<210> 8915

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8915

```

aaagttatat tggctctttt ggttttgttc gcacttccat atgaatttca aatctgcttt 60
tcaatttcta caaaaagcct gctagaaatt tgattagcac tg cattggga agagttctca 120
ttttagcaat actgagactt ctgaccttta aacaaagtat atctctccga ttatttaggt 180
cttctttaat ttatttcagc aatgttttgt agtttttagt gtacaggctt tacacttatt 240
ttgtcagatt taccataag tatttctttc ttttttttg agacagagtc tcagtttggt 300
ccccaggctg gagtacagt gttcaatctc agctccctgc aacctctgca tcccagggtc 360
aagtgattgt tgtgtctcag cctcccaagt agctgggatt ataggacag gccaccatgc 420
ccagctaatt ttttgattt ttagtagaag ccaaggnttt gcccggtgct caggaagggc 480
tcttaacctt ctttcttgag ggantnggca taccactccc tntggcaaaa ncctggtngt 540
n 541

```

<210> 8916

<211> 169

<212> DNA

<213> Homo sapiens

<400> 8916

```

cagaaaataa actgctttat tggaattaca ggagtgttgg tggccggtgg gcagagccta 60
gcaggggggtg cagccgcca ggcccgggtg tcccagctgt tgctcaggag ccgtgggccc 120
tgcaggagta tggggaggat atgatgtgtg gggagcaggg ggnnnnnnnn 169

```

<210> 8917

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8917

```

aaattttaa gcttttatta acaatcttct tacattacaa ggataaatg acaaaaagaa 60
agtttctgcg tacatattat gataaaccaa catagctcta tttgtatcca gtgttctagg 120
tcccgtcaca caggtactat aaagcgtagt ctgcaaaata ataacatcaa gaggtttttt 180
ttaaagaaag tattaacata ttaatatgta tgtgataata gactcctagg tatttcccc 240
catccccact tatttttccct ttgtgattga catgaaaatg gttcagcagc gttgtcctga 300
gtacagccag cagcagctgc tgcgcggagc gggctgggcc aaagccctgc ttctggactg 360
gagtagccat tgaatttatg agtgtgcaga tatgtctctc ccaccgtttc ctgctagctg 420
atgccccctg ccctggccag aaagncttgt ggatggtggg cagcgtgcc tggcgatgct 480
catgctgncc acatcctttc tctgacagn ggttgancag tgagggaagg cccgnacggt 540
tgcncttang 550

```

<210> 8918

<211> 551

<212> DNA

<213> Homo sapiens

<400> 8918

```

ctgtttttgg cacctttgtg gctgtgcaat ctgaagtctt gaattcattc atatattcat 60
ctaaaaacac tttaaaagtg ttgacccaaa ctctcactgg agattcacc agtgaatcac 120
gctgctcaag cctcatcgtc ttttcagaa tctgttcaaa tagtgcatag aggtctttat 180
accgtatgct tttcccatca tccatcgcca atgcagatga ataaaagctg aagatattct 240
gccgaaattc cttcagggtt tttttaata caacatccac tagtgtatcc ttcttgctgt 300
cttcattatc taggtcattc acctttttca gaagaaattc atccatgctt tttaaatcac 360
tgacacttgc tatgatctgg acagagtcac tttgccaatg catagaatcc aaagccacgt 420
tgctaattct cacacttgcg ttgcgcttan ccctttggaa aaggtcttgg nccctttgaa 480
ttccttccgg gaactgccgg caagttctgg gcttnaaagg aggtgttggg gngatatgca 540
gctaatacatn n 551

```

<210> 8919

<211> 553

<212> DNA

<213> Homo sapiens

<400> 8919

```

aaattagcca agcgaggtgg ctcacacctg taatcccagc ttctggggag tctgaggtgg   60
gaggttcact ggagcccaag agttcgagac tgcgctgagc tgtgatggtg ctactgcacc  120
ccagcctggg tgacagagtg agacccatt aaaaaaaaaa gaagaagaag aaagaaagaa  180
ctgtttatgg agcttgcaaa atcctcatct tcctacagga cacatacact atactcccca  240
cactcaaacc ctgactcttc catggctggg gctatcctga gtgacactat ttttctcaac  300
aatagaaaat agtttgatta tagtcctat ttctgactc cggaggagct catccaactg  360
accaggtgg cagcctcagg tgttggcgtc accttctggg tagacatctg ctggacaccg  420
gaagggagtc naagctggca atcttgaagg ccacagtcta caacattttg ggtanaggtn  480
ctcangatt ttttaaaaat gggaatctga atgcctttta ggagttttc ctttaagnc  540
aacattcta tac                                     553

```

<210> 8920

<211> 379

<212> DNA

<213> Homo sapiens

<400> 8920

```

ccgcggtaag gcctgtgctt tattgtgggt caatctcggg ggacgcggng gccagcaggg   60
gcgacgcccc actcttgggt cccagcagca cagtgagcag cagccgnncc accctgagcc  120
gccgnacaga aacagacacg cgccggcatg cggccaccgc cagcctnagg gccaggagcc  180
cccaaggcga ggagccaccc aggactcgcc tntgaaacgt ccttccagcc gtcgtcgacc  240
gtggtgtctc cacgtggcct ggccagtta gtccagctcg atggggctgc cgtcgnatgg  300
gtctcctcc caatctcct gntctgagga gccatgagg ctggtcanaa ggttcccgag  360

```

caggccccng tagnannac

379

<210> 8921

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8921

```

cttttttttg agacagagac tctgtcgccc agtctggagt gcagtggcgg gatctcagct 60
cactgcaagc tccgcctacc gggctcaagc gattctcccg cctcagcctc ctgagtagct 120
gggattacag aggaaggagt cagtaaactt acaaagagat caatagaaat tatctaactt 180
gaaaaacagg agaaaagatt ttttaaaaaa atgaacaaag cttcagagag ctgtgaaaca 240
atatcaaaac atctatcact ttgtatttg aagttccaga aggggaatgg aaagatatta 300
gtacataaaa cttttatitt gaagaaataa tggcagaaaa gttctctaata ttagtgaaag 360
atataaactt atgaaaatca aaaagtttgg ccaactccag atgggataaa ctcaaataca 420
atattttatg tttttatatg tgtaaaattc ctcaccagca gactttatit ctttttttga 480
ganggccnac tttggantgg gccccatga ggtnccccn cnaaccaag ggggcncctt 540
t 541
    
```

<210> 8922

<211> 550

<212> DNA

<213> Homo sapiens

<400> 8922

```

gagacagagt tttgctcttg ttgcccaggc tggagtgcaa tggtgcaatc ttggctgacc 60
acaacctcca cctcccaggt tcaagcgatt ctctgcctc agcctcccaa gtagctggga 120
ttacaggcat gtgccgccac acccggttaa tttgtatit ttgtttacca gagatggggt 180
ttctccatgt tggtaagct ggtctcaaac tcctgacctt aggtgatcca tccgcctcgg 240
    
```

cctcccaaag tgctgggatt acaggcgtga gccaccacgc ccagccaaaa gcaagtttac 300
 ctctacgttg aacagaagga gctagcagct ttggctgtgg aacacgggcc atgggaaggg 360
 ttttgtgggg agcactagga aggaagggt gagcagaaac agggcctctc acttctcctg 420
 ggcaaagcgc tgcacttcct gggcgatcct gcgcacagcg gaacccccct gctncttctg 480
 ggccaacacg ggcatnatng cctgggcnaa canggacctg tgcttcccgg ggacaccatt 540
 ttgggaaatn 550

<210> 8923

<211> 554

<212> DNA

<213> Homo sapiens

<400> 8923

aaaggcaaat aaaataagtt tattgggatg taaccccatc ataaattgag gagcatccat 60
 acaggcaagc tataaaatct ggaaaattta aatcaaatta aattctgctt ttaaaaaggt 120
 gccttaagtt aaccaagcat ttgataaca cattcaaatt taatatataa aaatagatgt 180
 atcctggaag atataatgaa gaacatgcca tgtgtacaaa ttcagaatac gctttttaca 240
 caaagaacta caaaaagtta caaagacagc cttcaggaac cacacttagg aaaagtgagc 300
 cgagcagcct tcacgcaaag cctccttcaa agaagtctca caaagactcc agaaccagcc 360
 gagtccgtcc tcggggctcc gtgtctttca acacaccgtg gacaggggag gaaatggggt 420
 ctgcttgctg accaccagct tntgatgctg atgcgatatg tagccctttg ccgggccccat 480
 gtntntcaag ttagcngaa tacactgaac tttgnnaatg ggccacgtct tcaactggnt 540
 ggaacttnaa ggga 554

<210> 8924

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8924

```

cttttttaaa cagtgattta ttgtgtttct taaggtaaaa caacaaaaac aaattctaaa 60
attgtaactt taaattaagt ggtaaaaatt tcagatgaca gagccgataa ctggtaacag 120
cttcttgaag ttcatattaa gagtccaatt agaaacacta acaactacct ggcaatagtt 180
tgaaagaatc agaagggttc ggtgaagtga aaaaaaatc cgaacatgca aaataccccc 240
caaaacacat gaccttcttt ttcattttat aatctaaact tgtaaaatat ttataaatac 300
atgatcattc tacacaatac agatcttcta gagcatttct aaaggatatt atagtttttg 360
gtcttaagga ataaagacta agatggaaaa ggagatgaaa acagtgaaat ctgaggaagc 420
aatacactct ntacacacaa gcaaactagt tcatccagtc aaggttagnc ggttcaggtc 480
agtncaatga tttcaaggca cctaagaaat caggaccoga tntttcccct cctagagtta 540
caattntttc aaaagctcca angtttcctt aanggggggc g 581

```

<210> 8925

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8925

```

cagatatagg gtcttgctgt gttgcccggc tagagtgcag cggcacaaag ctcaccatgg 60
ccttcaactt cttggctcaa gagatcctcc tacctcagcc acctgggtaa aaagactaca 120
ggcatgtgct actatgcccg gctaattttt tgttattttt tgtagagaca gagtattgct 180
atattgccca ggatggtctt gaactcctgg cctcaagcaa tcctcccacc tttgcttccc 240
aaagtgtggt gattacaagc atggtgaggc ccagcatgaa cagaataaag aactcattta 300
atcagaataa acacaattat cctacttacc ttaatcacac tcccaatatg gttctgttga 360
attaagagat ctggttagttc tgcagtgttc acagggagcc tttagaaaaa gctaaaagga 420
ggaaaaaatt attttaaat aagatcaaag catgattcta atacttcaa tcctattttc 480
aaatccaanc atgaaattct gnggcttaag atgatgatct agaaaagcaa ccccagangg 540
aaagaaaagc cccggagagt caaat 565

```

<210> 8926

<211> 459

<212> DNA

<213> Homo sapiens

<400> 8926

```

agctttgata catgcatata ttttaataatg aaacaattca tcaacagcaa aaagaaagtn   60
gaaaaattcg taagacctca gggctgtgga agagaatggg acatcaagga aaaaagatat   120
atntagcaac caaccanana ggctgcatga tgagtgaagc aaaggcaagt ttggctaana   180
tagtattata tgctctgaaa agagaatggc tggataggta cccacttatg tgactgctta   240
ctagcaggca gccttactgn atgcctcatg gaatggaggc aaaaagccag ggaaagggtg   300
gaggggagaa ggaagagAAC tgtatnaaac ccagggtaaa caaatgagtg gggcagaatt   360
nccgagagag gactctaaag tcttttgntt ccttgaaagt ctaaaatnaa ccttaagggt   420
ttaactatgt cantcaaatt caatggacnc ntaatgngt                               459

```

<210> 8927

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8927

```

ataaaacata aataatcatt tatactccat gattagcaat ggatcctgtc tgaagtaaAC   60
aaggacaatt aatacagtac aagatatttg tggttttgtt ttttataacc cactaagcca   120
agatttgat ctctgtatgg aactgatttt caaatggaca gaaatggctt ttgatctttc   180
tgaaccactt gtcttcaaat tcttctgagg atacagtcac caaggcagtc agggctacgg   240
agccaacaca cttcacctct ggggtgaactt catcttttat ttttctggg atatcttctc   300
ccataacctc agctatcaac agcaaagtgt cttctttgaa gctgaaccct ttcattttat   360
cttcaatttc ctgctgagtc cttaagttcc tctccaaagc aaacgatgtt tgctgagggt   420
gggtaaactg aagcagaagc ctggttcgta taaaagaggc catgctttag ctgagtctct   480

```


atcaacactg nttctctctt tctgccata cagttttgga tatttgcaaa agcnttctna 540
 ttttctggct atactgntat tcgctttcnn 570

<210> 8928

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8928

gaaatggagt ctcactctgt cgcccaggct ggagtgcac ggcgtgatct cggctcactg 60
 naacctctgc ctcccagggt caagcgattc tctgcctca gcctccagag tagcttctgt 120
 aaggctataa accacagaga ttttcaagta ccactcagtg ttcaggaagc tgaacattaa 180
 ttacaagtgc ttcttgaaag tacaagggtg aggatcttcc tggaagtact attggttaga 240
 taaaatctct cctgggtggca gtgcctctaa tcagagtctg gggaatccaa atgagacgtg 300
 gcaatcaaga ataagtacaa taaaagtcca aaaaggcttc aaaatttcca tctggaggaa 360
 gccaaagtgc ataaggagac tcaaactggg tcaggtacag agaatggtaa aagcagcatt 420
 ctaaacctag ccaagagcca ttgtctgtac actcagccgc aaaatgtgca tnaagactct 480
 gtttggganc tanaaattgt ttcaggccag ccctttttaa aggtccccca ggctantggc 540
 attnttttgg cncctngctaa aaa 563

<210> 8929

<211> 530

<212> DNA

<213> Homo sapiens

<400> 8929

gagggaaagg ggagtttatt tctgaggaaa ttcctaaggc acaaggaaaa agcaaggctt 60
 tcaggtaaaa actgatgcca tgggtatcta gttgcatccc ttcttctcaa gactactcag 120
 tatgtatgtg tatgccagca gtttatacta atatttttat ggcttagaat attatctcac 180

tttacagtga aggaggcata gtattcagga ttcacaataa cctaccaaag taaactgtcc 240
aaggagtttg ttgtctccag ccattctctt ttcacctga cacacttta tttccacttg 300
cgtttgacca tcagcggcag tagagaatac ctagggaaga agaaaccctc ctgggttgtc 360
aatgtgatta acctactcca tttctataga aaaaatgaaa gccaaagggt tacattccaa 420
gactggaaga ctctaattt accgnatgtt cagaacaaan gctgatgtct ttataggga 480
ttgaagtngg gattantacn gcaaatnggc cttccattcc aactgnitca 530

<210> 8930

<211> 542

<212> DNA

<213> Homo sapiens

<400> 8930

agcaaagcag ctgccactac agattgaatg catctgggcc atctgcgggt tactgggtta 60
aggatttttg ataggaaggc ctcaagtgtt tcgggatacg cccttgttta cactgactac 120
actgacaaca aagtgggtatt agagtgttac agggttacga agaatacctt taattatcaa 180
ttataggttt caaatttacc ttggctttta aaggaatagg gtatactgtt tttttcttaa 240
gtacttgat atttctttct cttttctct ctttgacttt ctgtctctct ctctctgact 300
ttccttttgc ctctgtctct tcctctttct gcctctctct ttctctgtct ctctttctct 360
tttcttgact ctttctttgt ctctctgtct cttcctgtct tttcctctct ttgtctctgc 420
tggcttttcc ttgcctctgc caaccgctt atgctgctgg tctcttaact actggggcng 480
ggaaaggggt ctaaaaacca nctggaactg nctatgangg naactggncct gggtgncttg 540
gg 542

<210> 8931

<211> 536

<212> DNA

<213> Homo sapiens

<400> 8931

```

gagctttaca gacttgttca tgtttttgag aacctatggg gatactcatt gggcagaatc   60
agagcccagc agaacacggg gacggggaag ggtaaagagg ggaaaccgac agagtcctga  120
ggatcatcccg ggaggaaggg agactacttc cagaagcagc agcacaaagg gctctgccga  180
gactntgcgg aggggggtcca ggggtactggg ggtggagggg tcccctcttg cagtgtgggg  240
ttactgtttg ggtaaagcga agtcccaggc agtttctgtg gcacatttcc acatggcctg  300
catgaggcga gtgaaacca tgtctttggg cttttccagg cctctcatca gccgttgctt  360
catgatggaa acaaattcct tattgctcag ttgccattg ccatcacaag tcaaaagagt  420
gcaaacacca cattacacac cttggtctga aaactccact ttagcccttg tcctggccac  480
ctgntgcatg ggtcacnttt ntcaananat gctccancct nttggtaaaa cctcaa   536

```

<210> 8932

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8932

```

gagatggagt ctcactctgc tgcccaggct ggagtgcagt ggcgccatct cggctcactg   60
caacctccgc ctcttaggtt caagcgattc tcctgcctca gcctccccag tagctggggg  120
tacaggcatg cgctaccacg cccggctaatt ttttgtatct ttagtagagg tggggtttcg  180
ccatgttggc caggctggtc tcaaaccctt gacctcaggt gatctacca cctcagcctc  240
tcaaagtgtc aggattacag gcatgagcca ccacgcctga cccactgtac gctttttaca  300
agcagcgtgc ttttcttttt ctttttttta aagacagggt ctcactctgt caccaggt  360
ggagtgcagt ggcatgatca cggctcattg cagcctcaac ttcttggtct caagtgattc  420
tcctgcctca gcctcctgaa tagctgagac cacaggcatg ccccttcaca cctggctaaa  480
tttttaaatt ttgnananaa tngagtctac tttaatgnnc aggcttggct naaattcn   538

```

<210> 8933

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8933

```
ctcacttccc tttttatttc ctctaagact tgcaagcagc agcaccagag agggaacctg 60
ccctcctggc cctggaaggg gccgaccccc aaccctaacc ccaggacaca gctggcacct 120
caggccccctt tccttctgaa aggagggctg tgtctctctc acattcacac atacacagac 180
acatgcatgt gtgcacactc atggcacatg ggacctcagg ggtagcctgt ttgccgatcc 240
ccccaagagg taccaggagg cagaccgcta gaaggagata agaggcacc cttgtctctc 300
caaccaagg aggaagaaag ctcaaccctt ctaggatagg gactgtcttc agtcaatgga 360
gcgttgactt agggggcggt tttgaaggtt ttttttctc ctttttgcaa gtctttacaa 420
aaatagaact tctcttggtt tttataaatc tacggncatg gctctatgtg cattgtacag 480
gtagaaaagc catatggggc acttcctttg ggtgggtaag gccttgatgg cctgtnatca 540
gtcccttng gcttganaag tctttgcggc acctnaaat 579
```

<210> 8934

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8934

```
aaatgggcaa agaacaatca tttattgggt tattttgtct ctactaaaca cattagtcac 60
ttatcattta aataccggac ttcatagaa gccgttgtaa cactttttct ccctcctgcc 120
ataaaaatac agtaagtaat ttgcttaaaa aaaacaacac aacactagga acaagtgttc 180
tggtttcttc tcaactgaact aaagacattt ctcagtgtat tcagtttgta aatcagtaag 240
acagtgcagg ctacaaatca gtgcaggctg aagactgaga ttcaaatgat cttccactta 300
aaagtgtga gctatggaac ctgctctctc tatacctctc catttcctaa catatataca 360
actgaaacca ctgatttata aactattaag tagtgctgaa ttctgtctgc tctattagtt 420
taaatgaatg caacttacct ttagcattat attcagaaaa atacttactt aagcctcaan 480
```

ggccccaata atttggagtc ctggactaga tacccttctt agacactttt ggcncagta 540
anccttcctt tagcanggtt ccaaccctg 569

<210> 8935

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8935

gtgttataag atgtgtacac cttcatgggt tattgtgggt ttccttaagt tttatcctta 60
ttaggatgaa gttcatgcat ttctacacta ctcttaacta aggctcaaga gacaataaaa 120
acatagaagt aaftttttta taaaaggaaa taaaataatc aagtactctg agtattttcc 180
tccattctct tatccagaat tttaaggcct ctgaaaaata atgaaataat aaaaatagtg 240
gttttgagat ctaaatttat taatatattg gattcctttt ctcagccaaa agctactatc 300
tgaattaagc ttttcagttt aaaagcctgg aagaccatcc ttagaagaca ttaaaaaatt 360
acttctgata cacacactcc taataattta gatagatatg aaaacaatct caaatnaaga 420
tcaaaaaata aagtcctgtg aaaaataacc tttggttgct cccaccaca ccgtcatatg 480
gatgatttaa actgcaatca tgaaatttgg aaaaaatngn ncgatcttat ctnttaaac 540
ccttcctcc aaacttgaac ctaaaanggt tcttgn 576

<210> 8936

<211> 572

<212> DNA

<213> Homo sapiens

<400> 8936

gcaaaacaat cagaaaacat ttattatact gaaatgtgta catcctacta ttaaaaaaac 60
aaagtaacaa atttgctggg gccaaaattt atttagcctg tttcactggg acgaactcac 120
gttcaatgcc actcagtata atttcaagtc tgataagcat ctaagtattt ttaccccgct 180

tctaaaacct gatgaggaat tcaaaataag cacacagcat taaatgacat ttattgttcc 240
 ataaatcttg agacccaaaa aggaatgcta aatagacaag caaaactttt aaaacaaacg 300
 agataaactc acttctttcc ccagtactg gtacagaaaa catgttgtca cacgaaagca 360
 aagggaaaaa gtcagaaagg aaaactctct gcctataggg atctatagga gttacagata 420
 ttttcaaate gatgatgaaa aatagatcgt gcttcttttg agcaaataat taacccccctt 480
 tatgaataaa cntataaatg tcaaaacttta ctactgaag tagttggctt ctggggagag 540
 attcaactca aaattcccat tntatTTTTT gg 572

<210> 8937

<211> 569

<212> DNA

<213> Homo sapiens

<400> 8937

atgagttcaa tttttttatt tctttacaat gatttcagaa gagattaca agagattaat 60
 atacttaaag aatcagactc ttgcaaacag tgacatcatt aaaaagagct ttttttcatt 120
 aacatgtgat taacaggaag gagatgattg gtgagttttc ttcgtaacca ggttcactgt 180
 ggataggaag ggcctgcctt ccttcccacc atggagatcc taaaatcaca agctccagcc 240
 tccatcaatg atgacagggt taccagttac ataagcagat tcatcagaag ccaaatacac 300
 gcagagcatg gctatttctt ctgcagttgc gaatcttccg tcttttgtct cttcaggaaa 360
 tcattccgtg cctcttcagg atttcctctg gcttgnattc tttctttagt agaatggcgt 420
 atcaactggt cctgggcaca cacagtttgc acctgatgcc ctgctgggat gaaatctgca 480
 gccncagatt tgtgagggcc aatcacggt gccttggttg ggctgtcaca cattgggtcca 540
 actcctgagg gtggaggaaa ggtcaccaa 569

<210> 8938

<211> 578

<212> DNA

<213> Homo sapiens

<400> 8938

```

aagatgaaac agtgttccact cacaaatctc ccagttgccg ttgtgttccc caggcttcac   60
agacagcctg gaaaaactcc tctagggtt gcagacttag ctggaaacta atcctgagca  120
ggaagcttgg cttgaaggga taagagggga ccctccaggt tggcaatcac gccgtttatt  180
cgcacttggc agcaagacaa tggatgatgt gggaggtgcc aggcccctgg gttggcacta  240
atttggagta tggttgagac agggctggag agaggcatct tagaggtggc ccccaaactc  300
gcaatcgga gaaaaaggca agaatcgact agagattgtc aggataaagg gaggcactgc  360
caccctgtct atgtctgtct gccccacag gggcttcttt aatactggg gttccctggg  420
tgatgaatgg tcctcctacc cttggcaagg ggcctacct gtcgccngg ccccataggc  480
aaccctgat gaaagagtnt cattccaag ggggcttttg gttctggggn ggncccacct  540
tgtcnggggt aaatggcnct gaaatgctta ctgagccn                               578

```

<210> 8939

<211> 539

<212> DNA

<213> Homo sapiens

<400> 8939

```

gtgtcatatc catagtntat tttaaaaaac tggntaaaaa ctaaccatac nggtttatta   60
atatacttaa aaagtntgtn ccctatgntg aagtaaaata cattagcaac atcttncgga  120
caccatcttt ataaaagtaa aacttctaga tcctgaaatg tactacagta gagtctatag  180
ttnacacttt taatcacaga ttggaattca ttctccttac tcccctactt cccacatgtg  240
gcagttatta cttcaaaatt aatgacattc actcatgtta tactaccaca gatccttaaa  300
tagagtacat actgcataat nactaacaga gccagtcttc tntatttggg gtcacatatt  360
ncatataagc atttgactta aagnacaaat agaaatacta catcccacaa ttgtaaacat  420
tcaccaggag cttccatagt acagtaagtn acagaggngg cccaagagtc agtcaagngg  480
tcttcactcc tggaactgg tgaaatttgg aaaaccngtt tgnagggaaa tnttcnaag  539

```

<210> 8940

<211> 579

<212> DNA

<213> Homo sapiens

<400> 8940

```

ggaggtatgt cctgaacttc catactatta actagacaca gaactgcaca gcaggatgcc 60
tgctgtgtgc attccagata tagtacatag ctcagctctc aaatcagcaa caaagaagat 120
aagcacacca ggtccacata gcagagaact tcacattatc aagtttctat ccaaagcttc 180
aaagaagcaa ataatatattt gaaagactat gtgataaaag gatcaatttt tagaaagttt 240
catgatctgt catggatcaa tagtttataa aggacactga aacttggatg ttgaggcaat 300
gtcaaattgc cccaagtttc taaatgctta ctcttcattt ctgtacttaa tgtggacttg 360
gatcaaatac ggcatgaacc cacattggtc cntggactgg atttgacta gtattggggt 420
aaagaagttg tcgttactcc tcgaggtagt ctcagatcta atttctcttg gattaattga 480
cactaatact tgaagcncct tacttactac tngagaatct atctactggg tatgctttac 540
gncttagctt tatcaaattt taagntttgn taaaaccnc 579

```

<210> 8941

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8941

```

gcttcatgtg aaattttattc ctcaaaaaaa aatcattttt tctaaacgta actcaacatt 60
atagtaatta tgcaagattt tatgcagctt caagagttag ccaagagaaa agttgactct 120
tgcaagaaga tatttttcaat gtctatgcag atcaggtagg taagagttaa gtgcggggga 180
gttggcatca tctaaaagac tgtagaaatt ggaccaaaaa tgtggagttc taaagcagta 240
tctccttatg gcatgccatt atttgagca acaaggttac ctactcgaat cactggatcc 300
tgagttgaca caaaacgcat ctgttgactc agggtttgta taaccacgtg cagtatttac 360

```


taggctatcc aattctgggt ccgtacaact tctggggcct gcaaattatt ggagagttag 420
tgaagggcaa ccgaaaagat agcataaaag gccccgtntc gaaaggnaac tggcaacatg 480
cactccacgt ttttagaacc gattcaatng gccccggtgg aagccttaat ggaccattca 540
gaaantnacc ctttggacna ttggaaatnc ctttgcnnat a 581

<210> 8942

<211> 497

<212> DNA

<213> Homo sapiens

<400> 8942

cttttctttc tttttttttt tttttttgag acagaatctc actctgtcat cgaggctgga 60
gtgcagtggc atgatcttga ctactgcaa cctccacttc ccaggttcaa ggaattctcc 120
tgcctcagcc tccccaatag gtgggattac aggctcccgcc caccacacct agctaatttt 180
tttgaatttt cagtggagac agggtttcac catgttggcc atcctggtct cgaactcctg 240
acccaagtg attcaccac cttggcctcc caaatgctg ggattacagg ctttgagcca 300
ttgtgcccaa ccacaagcac gtaagattct gaaggaggat ccaacattta catgaatttt 360
taagccagaa ttgggcttca agagattttg nccttcctga ggcttggcct ggctacttcc 420
ccagntacaa anaagtgtg tgtgcctntg cctncacat taggagcagg gtttggaaac 480
ncccatggtg ncaagaa 497

<210> 8943

<211> 581

<212> DNA

<213> Homo sapiens

<400> 8943

gaaaattcac agcattttat tcaagttaat caatttcatt caataatctg ccatattgtt 60
cccagcacca ctattactgn gtattatttc tctttgagga agaccaggta ttaagaaac 120

tggtttgaat ttccatgatg cctaactcta tggttaaaaa tccttttcct taccaaaaag 180
 gaactttcta atcaccagag aaacagaggg aagactgaga tatgtttgca gaaatttatc 240
 tctactagag acaattcata gttcataatc tttcagggtt gtgctttact tgggggctcc 300
 gttttcggga gcggtttgtt tcccataaat gtttgcttaa tacaataat ttgccccact 360
 gtaccacaga aggggaaatg agggctagt tccccagaaa gcaagcaggc agtcctncag 420
 ggaagaagcc ctaatggctc ctaatgggtga cagagtcatt ctggctnccc agcctgtgag 480
 ccaatattaa agtttaccta agtggacccg gagangnaat actagccnga taaccangg 540
 cttanaactt taacngaaat gcctgggggtt tgaataatcn a 581

<210> 8944

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8944

aaagaaggaa ggggtttatt aggccggagg catcagcaag actcctgtct caagagccga 60
 gccccgccc cgagtgagca attcctgtcc cttttaagga ctgcaagtc taagggggtg 120
 tgcgtgagag ggtcgtgatc gattgagcaa gcaggaggta cgtgggtacg tgactggggg 180
 ctgcacgcac cagtaattag attggaacaa aacaggaatg agattttcac aatgcttttc 240
 tatacaatgt ctgtaatcta tagataacat aaccgattag gtccgggatt gattttcaac 300
 taccagtccc aggggtgtggc gcccgggctg tctgcttgtg gatttcattt ctgcctttta 360
 agtttttact ttttctttct ttggaggcag aaattggcat aagacaatat gaaggggttg 420
 tctcctccct ttattcccc actttgagac tctnactcaa tancnnggag tngttcaagg 480
 ttactacca tgtcttcttt gctagacaga tcaatagnga ttatatagna cccttgggct 540
 gatgccattt gggcactaag ganccatnaa cttttatctt tgaanaa 587

<210> 8945

<211> 292

<212> DNA

<213> Homo sapiens

<400> 8945

```

aaaataaatt cttttattga gatgagagac ggacacacac tgggagggtt ttgntttttg   60
ttgttgattt ttttgtgact gagtccagat actcagggag gctcagactg gaggcggcgg   120
agcaggcagg cggcggcaag gctggccccc tggcgctggg gccgcgcata cttgaggaag   180
actgcggcgc gaccgcggcg gggacctcgg agcgcagcgc gggccatgca cggntcgagg   240
gtgcccagtt cctcggggct gcagnaggga natggnnaaa ctgatgcang nc           292

```

<210> 8946

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8946

```

cattaaaagt aaatttattg tttgtttaaa aaaaacaaca actgtgcaat atgtgctgnt   60
caagacatgt tttgaatcgc tttgttggtc atctcttctc gggcttcagt ttggcaaggc   120
tgaacatgtc tcccaagccc ttcagcattc ctttcttggc tttcatttta tccttctcct   180
tatctctatc tttcttcttt tcttttccag ttttatcctt ttttctatca gtcttatac   240
ctttctcttg gtttccattc attngnctct ccagagagtg ggaaggctga tcaactggctg   300
tggatacaga ctctctccct gatcttgaac tttcttctgn gtcttcttcc aaggtctcca   360
tgccttcac atcatcatct accgcgggtt tatcataaga tttgtcgatg gcagctctga   420
agctctcatt gcatccctcg cctctgatta tccgcggccg tggaccatgg aaanggaata   480
tnccattca aagncctcgc gnaactgggg gctggagact tttcaaaggg ctngcttttt   540
anaccnnggg agggcccat tttt                                           564

```

<210> 8947

<211> 587

<212> DNA

<213> Homo sapiens

<400> 8947

```

gcaagtgggt tctttagctc tacaaatfff taatatatat tataatacag ttaattgaca 60
attacagagc tgcatttctt ggctgggatt taacaagfff aaacaaggta atgaaatgaa 120
gaaaaaaaaa gtctaaatca acttactcta tatgcaatag ctcttcccaa gtattacgaa 180
actagaaagc atcattcatt cccaatccat tgcactaatc catcaatttc tcaatcatca 240
ctcattctta acactcacia tctttctctt cctgntagtc attcattaat ttaataaata 300
tttaatgagt cctcacaatg tgcagggcac aagtagaatn tggaaaacac cgtactgcca 360
aaataggtca ctaaagtcac taaggnacac taaaggcggg gcgaaangtg gtgttgagaa 420
cagttccaga gcttaatgct ttttgcttgn caagagtatt cttaatccnc agtaggatga 480
cccactggtc tttccagtga aaggftaatg gaaaatgngg caataagncc tnttttctt 540
ttaacaatta gaatgttntt gaaaaaatan gngagactaa agggccc 587

```

<210> 8948

<211> 601

<212> DNA

<213> Homo sapiens

<400> 8948

```

gagatggagt cttgctctgt tgcccaggct atagtgcagt ggcatgatct cggctcactg 60
caatctccgc ctcccagggt catgcaattc tctgcctca gcctcccaag tagctgggat 120
tataggcagg cgccactaca ccagataatt tttgtatfff tagtagagat ggggtttcac 180
catgttggcc aggctagtct cgaactcctg acctccagtg atctgcccc cttggcctcc 240
caaagtgctg ggattataga tgtgagccac cgtgccaga catcgacat atattttaat 300
gaagcaaaaa actcaggggc aagaatagca agcatgatac cacagtaaga aagtaggtcg 360
tgtgtatagt cagatttgta caattactcc tcaaatggaa taggaaaatg aatggaaagg 420
aattgtatta aaatgatctg atcccaaagc tcttgctfff ctgggattaa ggtaatgggt 480
tacaccaaaa cgtctgggtct ctgcactatt ggatctttcc ccattggntt ctaaataatt 540

```

gttgcnccgg gactaaatct ctttcaatta atttaatcca aaggaattag gaaaacccaa 600
t 601

<210> 8949

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8949

gaggcagagt cttgctctgt tgccccggct ggagtgcagt gacacgatct tggtcactg 60
caacctccac ctcccgggtt caagcaattc tcctgactca gcaccaagc agctaggatt 120
acaggcatgc accagcacgc ccgactaatt ttigtatatt tagtagagac ggagttttgc 180
catgttgggc aggctgggtt ctaactcccg acatctggtg atctgtctgc ctgggcctcc 240
caaagtgtg ggattacagg cgtgagccac cttgcccggc aagcagcctc tgatttcaac 300
tcaagagaca gaagaggatc ccaaattcca agcaactccc aagatgcaaa tcaaaatatg 360
gaaatgttaa acaaattgaa ggatttccca atagttacct gcaacaccta aaggcactgg 420
tttccaaatg ggcaagaact ntgcaaacia tatgttggtt gctggtnaaa tcaaggccng 480
gaccttttta ccggtttaac attttgntt gnccttttg aatttggggg aaactttana 540
ccccctgttt aacttangga ggcctnaaan t 571

<210> 8950

<211> 567

<212> DNA

<213> Homo sapiens

<400> 8950

gagatggagt ctttctctgt cgggaagaaa gaaagaaaaa gaaaagaaaa gaaaaagaa 60
aagaaagaga agggaggag ggaattagt accaaaaaga aaatgacatg atcagtgttc 120
ttttaatcac tcacacctga gaatcaaatt cattaacagt caacttgcgc agaccgtagc 180

aggtttcacc ccagccttag ggagtttatt tttaaatgca cggccttggtg catagttttt 240
 cctcgaatat gtatttcaca agtccttccc acaccttccc tggtagagaga aagcaattaa 300
 gactacacaa tggcatgact tacagaaagc aatttatgaa aggtagcctc actaatgttt 360
 tgcttccagg cttttcgata ggggtgttctt cttgcctgga atgcttggtc ctctncaca 420
 ttcacttccc tttgcctaac taattgctct tctaagtggc tcatcgcatg gatctcatac 480
 gtcttaaaaa ccctcattag ttcctaacac tggatcgga cctttcatgc tttccaaagc 540
 atcctgcttt accctacacc agccccc 567

<210> 8951

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8951

gggagtataa aaataggact ttttcccta tcacatcaat tatcaaagaa acagtacgta 60
 acaaaaatac aaagctctgg tggatttttt tgtcttttgt cccccccacc accacttcta 120
 cccaacagcc ccttgccagg gagcccttgg ctgaagcctg gacgctgtcc ctgaggtgac 180
 cccagggctc aggagaaacg gtggtccagg tctctctggg ggctagcaga gtatgagtag 240
 gccttgccca ataccaagcg gtcccggagc agcttgaaga aggcatagta gttgctgaag 300
 aggatgaggg ccagcgagat ggtctggtgc cacttttcag aggacattag ggagtacagc 360
 tgatagacaa tgacagcgcc ctccagcagc aggaggatgt tgaggatccg cangggtttg 420
 ctgaaaaaga aatggaaacc ggaagtggga aacctcagaa ggatagccc cgttgtaatg 480
 gnctacngct ttgtagaccg tcttgctggg cttanacaac acnccctggg gcacatgcat 540
 tnttaancca cgggtgctgg aa 562

<210> 8952

<211> 535

<212> DNA

<213> Homo sapiens

<400> 8952

gctgtcacat catgtatgta ttttaatttat acaaataac accaaggag gaaaggtaga 60
 tgggggagcg gggaagatac attatgattt gaatagtgtg ggtgattctg tccacgctct 120
 acatttaatc gacatgatcc agtgtgagca gagatgggag aggtgaatcc actgtttctt 180
 cgggcctgtc cacaatgtga gtatctctgt cctgaatgtg gtcctaatat ttcataaagt 240
 gtatatcca aattaacata aacctgaaca gaagccaact acttcatctg gtgcttaacc 300
 aaagaaactg ctacacaatg tttcaaacac aggagaaaac ctggttgta catatgctgt 360
 acagtatacc atacttaatt ataatttaac agcaaagtan aattttgacc acacaggact 420
 tttgctttta gatagacttt agaacttaac ttttccccct tttaaagctg gactttactg 480
 nntatcctct tncacaaacc tttccaaan ggatcnttnt tttccacttn agggc 535

<210> 8953

<211> 513

<212> DNA

<213> Homo sapiens

<400> 8953

gagacagagt ttcactcttg ttgcctaggc tggagtgcaa tggcatgac tcagctcact 60
 gcaacctctg cctcccgggt tcaagtatt ctctgcctc agcctcctta gtagctggga 120
 ttacaggcag gcgccaccac gcccggttaa ttttgcgttt ttagtagaga tggggtttct 180
 ccatgttggt cagtctggtc tcaaactcct gacctcagn gatccgcca tcttggcctc 240
 ccaaagtgtt gagattacag gcgtgagcca ccgtgcccgg cctagatttt tttttgctta 300
 aagacagggt cttgctctgt tgccaaggct ggagtataag tggccaatc atagctacag 360
 tagccttgac tatctgggct caagcaatcc tctgcctta cctcccaggt agctgggact 420
 ataggcatgc accaccaggc ccagctaant tttttttttt ttgnngcgga atttnactnt 480
 gnncccaggc tggaatgcan tggcccagct tag 513

<210> 8954

<211> 523

<212> DNA

<213> Homo sapiens

<400> 8954

```
gagtttttaa atagtcaagc tctcactttt caaatgttgg caaatatttt taaaaattta 60
aatgtgcagg ccaaacaaga ggcacaggga aacaggcagg ccacggcctc tgcagccctg 120
ggaaacgctc tgagtgatgg tgtacaggct atgcagtggg gaaggaagaa ctcagcacag 180
cctccaagga caacttggca gtatctatgg aaattttaca ttcaatagcc ttcgacccag 240
caattccatg tctaggagtt gattcttttg aataatcact tgtgaacaaa acacaggtn 300
aagaatgttc cctgcagtca agtttcagct gggcncantg gtnacacct gtaatcccag 360
cactttggga ggccaaggca ggggcgatca cctgagggtca ggaattcaag accagcctgg 420
gcaacatggc anaactccgc ttactaaaa atccaaaaat taccttggnc ttggtggcnt 480
gncttgnaat cccggttagc cggaaggtnn aaccccanaa ttg 523
```

<210> 8955

<211> 474

<212> DNA

<213> Homo sapiens

<400> 8955

```
cctgtaactg tgtttaaatt ccttatagat gctagatatt agccccttgt cagatgcata 60
gtttgcaaaa attttctgtc atttggtaga ttgtctgccc tgttgtttat ttgctatga 120
aaaagctctt aaatccaatt tgtccatttt tgcttttggtt acaattgctt ttggtgtctt 180
catcatgaaa tctttgccag ttcctatgtc cagaatggta ttgcctaagt tatcttcagg 240
atttttataa ttttgggttt taactcttta aaccatctta atttttgtnc atagtaaaag 300
gggtccagtt acgatcttct gcatatggcc aaccagttat cccagcacca ttattgaat 360
agggagacct ttccccattg cttggttttn gcaactttgt tgaanacaaa tggctggang 420
gtttgnngnc taatttttgg gctctctatt ctggcccact ggcctgggg gncc 474
```


<210> 8956

<211> 571

<212> DNA

<213> Homo sapiens

<400> 8956

```
gctttaaaaa attttgctat tgntataatt ttgatgcaat ggatcaaaat caagatacca 60
aaagaatatg ctacagcaagt ttcagagggtc aatatttcca tttaaaatta tattgaaaat 120
taaactagtt gaatcataat tattttatct agcaataaaa tagctacttc ttgaaaaat 180
tacttaaacc tataaacctc ttttaaaaat tgataaatgt tttatgatct tactttactt 240
ttttttcctt aagattctga gtcttgaaag tttatttcaa agaaaagaca atgcctgtgc 300
cacatatttg acttgggtga gtgactagaa actccaagag cgggataaac caaatttggc 360
tagctgaact gtataatctt aaaatatttc cttttatctc ttattctggc tttacctgac 420
atgatggcag catgtgagca aggacaattn caacatggcc ctgaaaaagt cagtaagacc 480
aaccagttag cttnggnccc cagcttttcc tcattctggaa ccccatcttg gccataaaaa 540
cctggacctt gatgggattt gaaaagccat n 571
```

<210> 8957

<211> 507

<212> DNA

<213> Homo sapiens

<400> 8957

```
atcaagatag ggtttcactg cattgcccac actgggtctca aactcctagc ctcaagcagt 60
cttcccacct tggcctccca agtgctagga ttgagtgtga gccactgcac ctgacctata 120
attctggttt tagcaataga cttacgtaag ttggttataa ataccatgag taatttaagt 180
gatagtaaga gaagtaggat agagactata tcaaggtttg agatcctttt gtcatttgta 240
agtgatgatga ctgggcattc acacgtgtga gatgtgcctc cctcaaacct tgttatgacg 300
```

tcggcacttt acccatgaaa aaggggttga actgcagact ggaagaaata ggaagccaat 360
 taaatagatc attgagaaga tcagtagttt gtgcctcttg taaccattta gcttgcttgg 420
 aaattctttc tngcaagtc tntactttac ccgangngtc natgtaagtg caacaggcct 480
 gtgagctctg gcaaacttct tgnccan 507

<210> 8958

<211> 584

<212> DNA

<213> Homo sapiens

<400> 8958

agtagagacg gggtttcacc cgtgttagcc aggatgggtg cgatctcctg gcctcgtgat 60
 ccgcctgtct cggcctccca aagtgcctggg attacaggcg tgagccaccg tgcctggcct 120
 gtgggtgttta tttttctatg ccaggcttat ttcacctaaag ataatgccct ccagttgcat 180
 tcatgttgcc acaaatgaca ggattttgtt ctttattata acttaatagt attccattat 240
 atatgtatgt cacattttct ttatccattc atctgttgat ggacacttat gttgattcca 300
 tatcttggtc attgtgaata gtgctgtaat aaacatgggg gtgcaggtaa ggctttgata 360
 tattgatttt ctttcctttg gacatatatt gaaaaccata tgattaaaat caataaacac 420
 aatgaaagca tttggcaaaa ttaaagcttc ttacatgaca aaagcctnta aaccaattta 480
 agtnggaaa acatatgcct taaccacaaa angggcgtaa agacaaccct tcagcttaan 540
 atcatnctgg acctggnaaa ngggaaaaat ggtnccttga aaat 584

<210> 8959

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8959

cagttgtatg ccaagtgttt aagctttact taaagtaaaa ttagagtatg aaacctattt 60

gacaatatat gaatacaaat ccataaaccc tgaacaaag catatataaa tgctcttacc 120
aatgcaaaaa cttccatctg ttagatacat aaagagcact tccttaaaag cgacatgtat 180
tttatactga ccgctgtagt caattttaat caaaaactac acaaataattt tatttgtatt 240
ttagagacgg ggttttgctc tgttgctcag gctggattcc aactcctgng ctttaagcgat 300
cctcctgcct cagcctccca agtagctggg actacagatg cacaccactg tgcccagcta 360
aatattttta tgngatttgt ttcaacagtt tatacccaca gttttgatgt gaaactggca 420
aacctatggg ctgacagcca cagcccatgt agagggatga ctntaagcnc acttaatttt 480
gnttaaaaaa aaaaaatctn gaccctgnta aaggncaaat ctgaatggaa aatgggggga 540
ttaatcntc catgggggac 560

<210> 8960

<211> 502

<212> DNA

<213> Homo sapiens

<400> 8960

agagggtaaa acactccaat gccaatattt tttcaaaaag ggctctgtgt taccctatag 60
tttgcctttt tttttttttt gtataattgt acaacctttg aaagttacat aagtttgat 120
gatctaatac tattaatagc cattcagaaa acactttccc tccctcccaa caaccatcca 180
gggggaaata aaagtcctga aaagaggcca gttcaacatg gcctctaccc tggtagaaac 240
aaaaagttaa aagagaagaa aacagaaatc aactaagagg tgttgccagt gtctctcagg 300
agtggggccc tggctgttgc ctgggggtcat gaaaggcaga gcctgcagca tgcagtatgg 360
cagccgggag accttgcagc cacatcttcc taccgccgca catncacatt ccaacttagg 420
ngtcatggga atctttcanc anggtcttc ttcgntgntt ccgctttatg catctgggtc 480
ttcaagtccc cnttggcata ct 502

<210> 8961

<211> 576

<212> DNA

<213> Homo sapiens

<400> 8961

```
gtatttttag tagagacggg gtttcacat gttggccagg atggcttcaa tctcctgacc 60
ttgtgatcca cccaactcag cctcccaaag tgctggtatt acaggtgtga gccaccgtgc 120
ctggccagtc tctgtctgct ttgttaacta ctgaaggctt taaaacttaa aggagaatgt 180
aaactacaaa tgaccaata cttaaagctag ttaacggaag tactgatact ttttattctt 240
ttcagggacc gtttatctaa aaaatgttaa ggcttatgct ttcagatctc agtccaattt 300
ctagaaatta acaatgagtc cttttatagc acttaccttt ctcttcctgc cttccccacc 360
tncaccccaa acttgctttg ggtgttcttt aatctttcaa gggagtata aatgtcacaa 420
actcttaaat aaanggtga aatggcaacc gtatgactgg tttgactggc tttnaagtag 480
tattagnctt ctanaatcta atctaaatct tagaaccgga aaccgangg aactcaatng 540
tccaaaggga agtttnataat aattggattc ttcneg 576
```

<210> 8962

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8962

```
aaagnntagc aaccctttta tggatgttca atacaatacc cgnatcatc acttatacaa 60
actttctcag tacaattttg ttcacgatca tgataatgct gaatgacaga gtgaggaagt 120
gggattaaca aaaaagtaaa agcttccaga ccagccagag cttaaagtcaa attaaggctc 180
tgctcttgcc agccactcca accttaaaga agttatgtta ttatcatgga taaattttta 240
cacaagattg taaaaattaa acgttaagga taaaagccca caacacgtga ctgatattcc 300
tcaaataatta atttactat ttgtgacccc taaataaatg catcttccag gtgttctgaa 360
cacctagggt atagctgctc agcatgtaag cccctatgat aacttgagcc ctttccccct 420
tccttcccca gtggtgaang gagaatgaca ttccttntcc tggccactgg ctcaaagggt 480
gcttatnggc tatgcacagn tcccccaata nttcctgggt ggagctcnn tttcaagggc 540
```

naggccaa

548

<210> 8963

<211> 507

<212> DNA

<213> Homo sapiens

<400> 8963

```
gatttaattc ttcagctaaa acagcggaag agnggattta ttatatgggt ggtacacttc 60
gggccccaaat aaacnccaga aatagtcnn gaatgtcaca aggtccaggg cagaggactg 120
aaatttgtgg cgagctgcat ggaaccgttg gttgatccct acttggtacg atgactggta 180
gccagggtg ctagctgatg accccaataa acgcttagtg agtaccggcg aagagcaagg 240
agaggatgtt agagaggagg aggcagtgt gctgggagac agtgagctcc cactggaaga 300
gaggggactg ggcattggga ctggagtctc aatccccaca ggacaccac cattctccac 360
tggtttctct tgggccaatg ccacagattt ttcccgtagg ggcaactggn tttctacatt 420
ggtgcctgca ntcaacttcc tgggagttg gatctctngg tcacaatggc ccttgggttt 480
tgcattttan tnaaccngaa ttgcagg 507
```

<210> 8964

<211> 292

<212> DNA

<213> Homo sapiens

<400> 8964

```
cctgagcagt cggncccaac agtgggctta aaatactcag tccactatga tgtaancaga 60
catgctgnca tccaggcttt gttgntccat ttataangcn caggcagagt agattcacca 120
aattctaagg gtcctaggat tatcagaatg ataaangagc actagcttcc acttaaaagt 180
gaccagctgc attatccact aatgagagtt agcntgtcct ttcaaagcag atgttgncn 240
ctntctagtt atgaaagncc tanacggcac cttcttncaa tggaaggctg aa 292
```

<210> 8965

<211> 570

<212> DNA

<213> Homo sapiens

<400> 8965

```

aagtgttaca aattttatta aaaattaaca tttcaagagg tcatacgtat acaaatacaa 60
ctgcaaaaaa ttccaggcat aaaaactatt atctggggtta gtgtgccatc tttcttctcc 120
aaatgtcaaa atgtccacaa aaaaagtctt tagaaagtca aatccactgt ccatttgtgt 180
tgggtaagag acctatgtct tcattcactg catggaatcc atgttaaaag aaccctgtct 240
tggttgtata ttatcacagg actcttgtat taatccattt ttctcaatt ccccatagta 300
gactgccatc ttgatttctc agtggtaggg tccatttgaa actcttcaag ctgactgggt 360
gtaaatgttt ccaccaatgt ctacttcatt ggatggggcc tttagaggat tcaagtttga 420
ggttcatatt ttgtctatat aaaatactga ctttnccaaa gatttccttt atcctctagg 480
ataaaactnc acggtctcag cttcaaaatg gcatacctca aatnaaagac ccattattgg 540
tcagaaccaa ccgnacccaa tttatTTTTn 570

```

<210> 8966

<211> 464

<212> DNA

<213> Homo sapiens

<400> 8966

```

gagaaccaga atgcttatat tttattagta tccaagactg gggagaggga tggggtggga 60
gagatcaaga attgggggagc agatggggagg cgctacctca ctcaggagac acgagttctt 120
atccaagttc aaggtgaaag aagtgagggc aggaagagaa atctccctgc tagcaacagc 180
gactcaggga gaaactctgg gcccatagct agctggaggc agggtgacat tgctcccacc 240
aatgggcat cttcttagct acacctttgt agctgtgggtg ccaggcagaa gaaccacctg 300

```

gaaactgagc taaggcaggt tccttcttcc aacagaagac acagctgggc agggactgtg 360
cagactcaac agggccaggc cagctagtgg ccnagtcagn gttcatgtct ctcaccantg 420
cctggagggt ccccaaccna ggaaagaact ggncantnct gccca 464

<210> 8967

<211> 440

<212> DNA

<213> Homo sapiens

<400> 8967

gagtaatgcc gactttatat cagcacaccc agtgcccccc cgttcccgtt ggcccaggtc 60
ccggagacca tgatggcacc cacagtggac ttcgcaaagg agcgtgggga ccccgaggc 120
caggccaccc ctcanatggg ggtcccatgc taaagcagac ggtgccggtg ccgcagggcg 180
tntgagaccc acggtggagc ctgggcctgg cgtgcgggag gcggccacga cggcgccttt 240
ctcccaggaa ctccgggagg gaccccagga ctnagcgcca gggcagcctt ggcaggtgca 300
gtgaggcant gacttgtggg ggtagatgt gggcctgccc cacgtgggca gggatcagcc 360
aggcatgggg gtncancggg atccnantgg ggcacannca ccatgttttc gnaccattac 420
caaagcccca ttgttttaag 440

<210> 8968

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8968

cagttgacac ctgggtcagg tgctctatta aagagtcatt aaaatcatgt ggccaggga 60
caaatacagt cttcgaatgt gacgattcaa gtttctcat tgctgaacat gtttaggcag 120
gtacaggcat ccttaggtgt ccacgtattt gggacatgta agtggagagg catgaacctg 180
attcatttcc tgatccagtg atgctcccag cccaccccca aacagacaca gcgtagcccg 240

ggccagctct taaggagttc aggagtgaga agaggccctc agagatctga cagaacaagt 300
 cttacgtagt ggcctgtaaa ccttcccaga aaaagggctn ttaacaattt cacctgggtn 360
 ctgnacactt tggacagaag tcctttaggg ttccagactg gnttgctctt tggetgacct 420
 tnaattccct ttccangact tcgaccantc ccctaaaccc agagcatttt tttccctnat 480
 nttttngggc ttgtcctggt taancctttg ttgggaggct gaactggnac ttttggggaa 540
 cctgancctt taaaggangg gtttt 565

<210> 8969

<211> 357

<212> DNA

<213> Homo sapiens

<400> 8969

gctagcaggg gattgggcca gacaaccctt gaagccatgt ccctctcttt gattctatga 60
 aatggcagca cagtcaccta cagacatntg accttaaaca ctggcccatn tgcaatgcc 120
 cggctgagtt tcccaaccac aggtaaaggc cccacccaaa agccaaattc tttcagtcaa 180
 agctcaaaaa tttcagccca gcaattggat ccctgtgaag gctacgtaat aagcatagac 240
 aaaaacgtaa aatcaaaaga aaggtttgga aatgaaagtt taaatatggn aactgaagtc 300
 caaccnatgg natnatntac ccccaccctt ttttcncat aaatnggatt caaaatg 357

<210> 8970

<211> 489

<212> DNA

<213> Homo sapiens

<400> 8970

gccattaagg gccttttatt cgtattcatc acatcggana tcattctctt ctaggaagct 60
 tttaaaaaat ccccaggttg gattagggca ctccctctgg gtccctggca atttctcca 120
 ggtagggat cccaaggggt cgctgccttc ctgggtctct ggccctggccc ttggggcaca 180

cagtcatnaa naantgctgg ggggaagtga gctcttttatt tanacatagc tctgctgagt 240
 ggaaagtggg caccagcccc attaatgctt gctggctggg ggcttccaag cacgccccac 300
 tgccaaggct canctctgca gttcttggaa gtattgcgac cgaaggcgca natgcaagct 360
 gactcagcag gcacagtga nctcgccagg ctccactgag agtccacgta ctgnccaatc 420
 atangcccca ccttgnccac gccaaccaan gcggaaccgc ggntgaagcc ggtttcctgn 480
 nagccaaaa 489

<210> 8971

<211> 410

<212> DNA

<213> Homo sapiens

<400> 8971

gcacagattt cttttcttct ccaccttctt gatccttctt ggctttggaa gtcttggctt 60
 gggcagagaa ggtaagggtg agtttggcga aaagttcatt gttctcaaag cggtcctcct 120
 tcacctttgt ccagaagcag tcctgggaga ggtcctcagc cacaagcttg gaccagtttg 180
 gcctccggag ctgcacctct ggcttataaa gctttttggg ggtaaatcca aatggcagaa 240
 ctggggctgc aggaactcca aatccaaatg ggggaggttg aggcatacc attccgggtg 300
 gaggtggagg aatgccaggg cctccgggaa atggaggagg tggagggatt ccaggaccac 360
 caggaagagg gggaggagga ggtggcnttc ctgcttntnc anncnangga 410

<210> 8972

<211> 386

<212> DNA

<213> Homo sapiens

<400> 8972

gaattctcag gaagaatgac aacacatcac aaaaacgggt ttctttttga gggctctcact 60
 cctgtcacc agactggagt gcaatggcgc gctctcggct cattgcaacc tccgcctcct 120

gggttcaagc aattcctgtg cctcagcctc ccaagtcattg gggatcacag gcatatgcc 180
ccacacctgg ctcatTTTTA tatttttagt agagataagg tttcgctacg ttggccaggc 240
tgctctcaaa ctcttggtt caagtgatcc acccctctca gcctcccaaa gtgctgggat 300
tgcagagcca tcatgcccc cctaaaaaaa ccggtattaa atggaaagnc aagtttaa 360
gttccngncn cnatggctna ngcctg 386

<210> 8973

<211> 496

<212> DNA

<213> Homo sapiens

<400> 8973

gagacagagt ctccgttgcc caggctggag tgcagtgtcc gtgatcttgg ctcaactgca 60
acctccacct ctccaggttta agtgattctc atgcctcagc ctccctaagta gctgggacta 120
caggcacgca ccaccacgct cggctaattt ttgtattttt agtagagaca ggttttcacc 180
atgttgGCCA ggctggtttc aaactcctgg cctcaagtga tccacctgcc tcggcctccc 240
aaagtgctgg gattacaggc atgagccacc atgcctggcc ttcatccat ctttaaaca 300
attcaatgac catctagaga cagatgtgac caaagtgtta caaatttcta tgcattttct 360
atgaattgct ctgtgcagtt cacacatggg ttcatcacc ccgcaggctg tgaacttct 420
tatnctgnan gctgcaggnc ttaagnttca ncaactcncg aacaaaaaga cttaaagggg 480
gacttggtta aaataa 496

<210> 8974

<211> 583

<212> DNA

<213> Homo sapiens

<400> 8974

gttgctattg ctttattact catagtttcc aagcaatatt acatatataa aagtcatttt 60

aaaaacaacc aggtttgcta gaaaagtgtt ttttcttgga atcatggatt tctacaccat 120
 tcatacctgg agtcctttat attaaatata ttatttacgc aggcactagg caaaattgaa 180
 gaagttttga gttatctect ccataacccc caccttccca cattcccaca aaaaaatccc 240
 accctttccc tattatatgg gttattaaca ttaaaaacaa taggaaaata cacaggcatt 300
 tcaatttgaa tcacttttcc ctatttttac atgtctggag atgttggctt ggttatgaat 360
 tcaaaagttc tcccagagtt ctgatgatg attcatagag aaatctttca atgctatcct 420
 ctcccaaagt aatttccatg aatgncttta gttttctgtg aacagtggct gnaaccttcc 480
 ttacttttgg cttttatggt acccgcttta taaccggat tattntgccc gcanccgga 540
 gggcacaagg ccttaaaatc nttttnagcc cccatngcct ttn 583

<210> 8975

<211> 349

<212> DNA

<213> Homo sapiens

<400> 8975

cagttcagta tatgaaaatt catttattta gtgaaaccct acattaaagc gtcccaacac 60
 aaagcagatt cgaacataac aactggatgat tggctcatct cacaggctca catcatcagt 120
 gtgttaacta acatacaata ggactgtacc cttttacagg attgagtgtt ttggatccca 180
 ctcacacact aaaaccctgc cataaagttg tatcaattag ggctgttcaa atgtgaaact 240
 gtattggaaa atgggaaact ttatctcctt atatatgtat attttttgag atggcgtnn 300
 gcnccttngc ccatgctgga ntgaagtggc nctatcctgg gtcactgna 349

<210> 8976

<211> 563

<212> DNA

<213> Homo sapiens

<400> 8976

gagacggagt cttgctctgt tgcccagtgt ggagtgcagt ggtgccgtct cggtcactg 60
 cangctccac atcctgggct catgccattc tcctgcctca gcctcccaag tagctgggac 120
 tacaggcatc cactaccact cccggctaac tttttgtatt tttagtagag acgggggtgac 180
 cgtgttacc caggatgggtc cgatctcctg acctcgtgat ccacctgcct cggcctccca 240
 aagtactggg attacaggag tgagcaacag cgcccggcct cctttgccac ttttaattaa 300
 gttctagaca aaggactcac agactaccag attattttta gaatatattga ttataatcta 360
 gaaataggta tgttctgaaa aagtactact gatacagaaa aggtagtttt atagatggat 420
 ggatttaaat ttggagtatt atgagttggt tcagaagaat ttaagaaagg cagtctcaca 480
 aaacncacca aattttattg agggaaaaga ctttgcataa aattaatttt gaattttgnc 540
 cngccatttc attccactga ttt 563

<210> 8977

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8977

cccctagcat gtccttaagc attttctccc cagcttttca caatctttct tctaaggctg 60
 taatgtctta catccttaat aggcatgatt agatttctcc caaattttcc aaattaactt 120
 tctttcaatg taacaaaaac aaaacatgg catcacagtaa actaaaagg tagacaggag 180
 agaaagggtg ctgcaattac agaaaattta gaaatcagcc tttaccagtt acatctgaga 240
 caaggtaaac tttccaacac attggaatca tcagaagggc tttaaaaaat acaactgcc 300
 gccgggcatg gtggctcata cctgtaatcc tagcactttg ggaggccaag gcgggcagat 360
 tgcctgagct caggagtttg agaccagcct gggcaacaca gtgaaaccct gtctctacta 420
 aaaaatacaa aaaattagct gggcgcgga ntgtgtgcct gtagttncag ctactcgga 480
 agctnangca ggaaaattgc ttggancccg gaaggcaaag gttcaatgag cccaaatcgn 540
 nccatgga 548

<210> 8978

<211> 517

<212> DNA

<213> Homo sapiens

<400> 8978

```

gnnagttgat gtccacttag aaagcaggtg ntgttacaaa aatggngtta attatataaa 60
tggnccttgc acagcatgtg ggttcataac aagctggcac ctctgccaaa aaatgaagtt 120
gcttaagtaa tgggtgcaga agtccataag caccctcgct cctggaacat taaccactct 180
gagatcctca ggggaaaggc agtctataaa tacgaagctt tacggttacc cttagttact 240
tcacttttca gagcataatg caatctgtcc caagtcccat gttttatttc tgtagtggat 300
tctgctgtcc tattttatat attgnatata atgcattatg ttgctctagt aatttttttg 360
aagatatgtt tccactatta tttttacttg tcttgaaaaa tggaaatagg cggtaatgga 420
aaggaaggcc tgctggcaga atccttattt aatttgcaca gtagaaagtt gncttatgng 480
nctgctactg gtcanggatn ccaactcgtn gaagana 517

```

<210> 8979

<211> 564

<212> DNA

<213> Homo sapiens

<400> 8979

```

gagaggggag tctcgctcta ttgcttaggc tggaatgcag tgggtgccga tcttggttca 60
ctgcaacctc cacctcccgg gttcaagcaa ttctcctgct ttggcctcct gagtagctgg 120
gattacaggc acatgcacca accctggcta atttttctgt attttttagta gagacagggt 180
ttcaccatgt tggccaggct ggtctcgaac tctgacctc aagtgatcca cccacctcag 240
cctcccaaag tgctgggatt acagggtgta gccactgcac tggcctaaga ttttcatttt 300
aacagggaac tgttagaaca gaaaagaagc ttcccaagag gcactcattt taaaaataaa 360
ttatagctta aattattact atgtggatta tatcagcaaa ggcagaaaga attaatgttt 420
tcctcctttc atgaaccttg taaggctagt gttgagtggc ttacaaatgt catataatgg 480

```

actgtaaadc atctgccata ttgatcaadc atgttaattt aaggttttct taacattaga 540
gatttttaac ggggagnta aaat 564

<210> 8980

<211> 560

<212> DNA

<213> Homo sapiens

<400> 8980

gataagagtc tcactctgtc gctagggctg gaacacagtg gtgtgatctt ggctcactgn 60
aacctnccgc tncagggttc aagcgattct cctgtctcan cctcccaagt agctgggatt 120
caggtgccca ccaccacgcc cagctaattg ttgtatTTTT agtagagacg gggtttcacc 180
gtgaccgcc tcggcctccc aaagcgctgg gattacaggc gtgagccact gcgcccggcc 240
aggatattct tttttgacca atattagtta atctaattgg cacagttagc attaatgtgg 300
caatgtacag tgcgcagtgg ttcatggaag agggaaattg gggatgtaa tgtaagtgca 360
cccttaagac tatcaaaaca caatccctta tgtctcctcc atctagatct tannaataat 420
ttnattcatt tcatttctga attgggtct gacctgggtc ttaattgcgt cagataaaca 480
tttccatggg gggaacccat aatnggtcct taactcangg aagaacctat tggtttgacc 540
aaacatgtcc tttccaatac 560

<210> 8981

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8981

gagacggagt ctcactctgt cacacaggct ggagtgcagt ggcacgatct tggctcactg 60
caaactccgc cttccaggtt cagccattc tcctgcctca gcctcccaag tagctgggac 120
tataggcacc tactaccacg cctggctaatt tttttgtatt tttagtagag acggggtttc 180

accatgtag ccaggatggt ctccatctcc tgacctgtg atccaccac ctggcttcc 240
cccagctaatt tttttatatt ttagtagaga caaggtttcg ccatgttggc caggctggc 300
ttgaactcct gacctcaggt gatccgtctg ctttggcctc ccaaagtgt gggattagaa 360
gcgtgagcca ccacgcccag ctttttttgg ttttttagt agagatgggg ttctgccatg 420
ttggccaggc tgggtctcaaa ctctgacct tangtgatct ggccacctta nccttccaaa 480
gtgcttgat tcccggataa gccctgngac ctggccnggg tntcctnggg aaaaagn 537

<210> 8982

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8982

agtagagacg ggggtttctc cacgttggtc acgctggtct cgaactcccg acctcaggtg 60
atctgcctgc ctgggcctcc caaggtgctg ggattacaga cgtgagccac cgcaccacgc 120
ctcttaattc ttaatggggc caaataatcc ttccctccg aaatataaaa ccaggacaag 180
agaaaaatgt gagttctctc accacctatt cccactacct tccccctca gaggccaagt 240
ttggctgcat gtgatgatcc ctgctgctct gtgctgttcc tcacccatct ccaactgaccc 300
aacagaaggt ggcgctatta atattatgcc tcctctgaca cctgctacct gtcgattagc 360
agaggatgtt taccctctg cccttgaaat caaatgtcat ttgtctgatt acatagaggc 420
tatgtgagaa tgtttttcaa gaagtctaag aggaaagtga cttttaaacc tggaaatgnc 480
ttgagtcatg gggtaaattg ttctttaatc ctattcacen catcttgnt ctttncctta 540
aatttncnca aaatt 555

<210> 8983

<211> 555

<212> DNA

<213> Homo sapiens

<400> 8983

```

gacatttttt gctttattaa acatcattca ctgagaattt ccaaagcact gcgtggtgcc 60
tagacctgtg taccagcgct ctgggggtca ggagaagtct aaggcacggg ccctgccctg 120
gcgcacggct ccttctccct gggaaggcag ctccactggt gaaaggccac tgaccaagtc 180
cagaccctga ggacgacgaa ggcctcgggg cagaagcctg agagaatcat gccccactgg 240
cagtgggagg cgggtgcaggc tgggagccct gcccaggccc caggctgagc tgtggggaaa 300
gctatgacct agtttgctga gagctgcaat gacgaacatt ggctctgtgc ccagaggccc 360
aagaaggcca tggactgggc tggcctttcc tgggaaaggg ggaaggagga agaactgggg 420
cctancaggg ccgtctatac cctggagagg caggcctgac ttcttcctta gagcttgcac 480
naagaggagg ctcanganaa agagacttgc atnaanaaca cttcagncag ccgatntcca 540
ctcagtattt ctttt                                     555

```

<210> 8984

<211> 500

<212> DNA

<213> Homo sapiens

<400> 8984

```

gttcagcttt tactggaaac tgctgtctag gaccacctgc cctaaccagg aataaaggca 60
agacagcctg gagaccagtt tgtttcttca gctgcaaaca gctgcctggg caggcagggtg 120
acacaaggcc tctgtcccca gggatgggag agggcagagg tggcggctgg gtgagttgcc 180
ggcctcagct gggggcctgg gggaggccct tcttcagcag agatgtgagg aagctcccca 240
gtcctcgtc ctggtaggtc caggagacca gcagcacctt ggtgcctggg tcctcagaag 300
gggcggcggc ctggaggagg acggactcca cagtcacaga gccgtctggg aggtgctgca 360
cacagtggtc cttcaggacg ctcttgaggt ggctgtagac gcgcaatgcc gtctcctgct 420
ccttgctgtg gtcattgcaag tgcacgccgc angtgaaacc caactggtgc ttnanncaga 480
cccanntttt tnaggccttt                                     500

```

<210> 8985

<211> 537

<212> DNA

<213> Homo sapiens

<400> 8985

```

gagatggagt ttgctcttg ttgcccaggc tggagagcaa cggcgtgac ttggctcacc 60
gcaacctccg gttcctgcat tcaagcgatt ctctgcctc agcctcccga gtagctggga 120
ttactggcat gtgccaccac gcctggctaa ttttgtatit ttagtggaga cggggcttcc 180
ccatgttggc caggctggc tcaaactcca gacctcagg gatccactgc ctggcctcc 240
caaagtgcct ggattacagg cgtgaggcac cgtgcccggc ataagcttta ttttcaccag 300
gtaaatactt aagtacaaat gatagaagg cgggggggtg agtaagacct aagggttaga 360
gtcatcaaaa ataatatcag cattaaccag tgaccccaat ttactgnctt cctacatcac 420
aacatcatgt cagctttaag atgaaattaa accnagtga nctagggcgt ntgnittctaa 480
gggagcnctt taaaattaat gganggggaat tcccacgggg tttttggttt ccccntt 537

```

<210> 8986

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8986

```

gttttattca gttatcacct ccagctttgt acttcagcag ctgactttcc ttcttcactg 60
gggagcaaat ctgcacttgc cttaaataaa tttctatit ttgactacttt tcaaatttat 120
cacatttttt tcctaaagta ccgagaacta acctatctt gtatttcttg cagcttccca 180
atgctgaggg agtcttagag gcatttgctt tgtttttatt aggagtatgg tttatagtca 240
cccagccaga atgtgatata caagggttta caaggaaaag tagaaatggg tgtagatgta 300
tgtgcttggt gtaagaaaaa ttacactta cagatgaaag atccatatat aatccagcca 360
cataccatgg aaaggaaaaa caagaagaat atgtaatagt gatggttgcc aaaacctatg 420
caccgtccag tccacaggca gtgttgatca tatcgagccc acagcagttg catacatggc 480

```

antggagtga ccctaanggn tttcctatct aaaaggggca tttaaaaaag gccttaccca 540
aaacccng 548

<210> 8987

<211> 525

<212> DNA

<213> Homo sapiens

<400> 8987

ctttttcctt tttttttttc ttacagtacc atgggaacaa cagtgattga cttgcaaagt 60
tttctgtctc tatggaaaat gcaaaacagt actacagaaa tacacaatgc actgtaagca 120
gcggtttgct gtagtggtcc aacaggtaca agcaaacatt ttggctcagc taggcagtaa 180
tccacttaaa ccacatcccg gggctacggc cgaccaacc acagctcctg tgggatcaaa 240
aagaatgggt ctgttttaaaa ataaaaattg ttatgttttg tgctgctgtc caaaggactc 300
aaaggacaga gtcattgaggc agaagtttcc caaccagatc tagaatcact gggaccactt 360
ccttcctttc ccttctacca acctagagac ttggactatg gtttcaaagt gaaattggca 420
tttctagcaa tgaataccca cagccctcac ttcttttaaat atcaacagag aggntccttn 480
caccaaggnt cattgntccc tcccagattg gnaaaaggna acct 525

<210> 8988

<211> 527

<212> DNA

<213> Homo sapiens

<400> 8988

gcatgttccc gtatgcttta ttggaatgct gtcagggtccg cgccttcac ctgggccctc 60
acacacagca nggagagcca cagagggtta cgaccgacgc gggcttgaca gcacaggccc 120
aggcaggcgt ggactcggga gccgagggtg gtcggatggc agcgtgagcg ccagtatcat 180
ttccagcatt tccatnttta ccaactccagt cactctnttc aaaaagaaag aactagagca 240

aaaccaaagt taaatatctc aacgagaagg gacacctcac gtcgctgaca gctcggcacg 300
 tggctggtcc caggccccc an agatactgcg tagtgaactg gccgctggaa cgcagtcaca 360
 ggcctctgng ctgcagccca cctnccagca agccaagcan agccccgggn cttgagtcca 420
 aaaatgcccc aggggaatgtg ggacnggacg ggccccc anac aggtgganaa gnaagccggc 480
 cccaagcccc gaaanttccc acgccaaggn ggggnaaccg gttttct 527

<210> 8989

<211> 548

<212> DNA

<213> Homo sapiens

<400> 8989

gaatgctaag aaaagtttta attgtgcaaa tgtggtacat aacatttcaa atgtaagtgg 60
 aaggatcatc agtagtggtta tcaaaatgca taatacagaa actttttaag aaaggataaa 120
 aaattacact caggacccat aactcttcct cattataagc atatgtagtg attcattcat 180
 gcaggttttt atatgtagat aggatttttt tticcttttc aagaattcca ttgtagccat 240
 gagatgaaaa atgtattatg gtaatggtat agctttcttc tattttgctt ttagtgttag 300
 gtttgctaaa agcttattta aaattcccaa ctgacataat gtgttttcaa taaggaggac 360
 gctgccgtgt ccaataccct tcccctgtca ttgttcggta ccatatctcc tggcttcctt 420
 ctacatgggt cacttaagtt aagagggagg ccaagggaag ttcccgattt cangcagtgt 480
 gtggcagggn tacctggcct aacaacctgg ctactcctnc tgggaccgtt ctcaaangng 540
 gcataatg 548

<210> 8990

<211> 541

<212> DNA

<213> Homo sapiens

<400> 8990

aaagacaggg tctcactctg tcaccagggc tggagtgcag tggcatgata acggctcatt 60
 gcagcctcaa ctctctgggc tcaagtgatt ctctgcctc agcctcctga atagctgaga 120
 ccacagggcat gcccctccac acctggctaa tttttaaaatt tttttagag atggagtctc 180
 acttagttgt ccaggctagt ctaaaactcc tgggctcaag tgatcctccc accttggcct 240
 cctgagtagc tggaccaag ggcgcttgcc accactccca gctaagtact tttcatatta 300
 aaaaaaaga agaagaaaaa agaaaaaac caactccact tctaatttca caacagaaaa 360
 attcttctag tgctattact ctacttaatt caatcctggg gttgttgntt ttttaaatca 420
 gaaacatgaa tctgtccaac actttttctt aattggctcc ttcccctaca gaacacttag 480
 gtagcgagct gcaggaaact ggctttgncc tggggtgggc actatggctt tggccacttt 540
 a 541

<210> 8991

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8991

aatagttaga tgactttatt tagaatatac attgcaatga ttccctccca cagaaatcac 60
 ttcaaaccgt aattctcaaa tactgtgcaa cattcaacca gctaaggatt tcacgtgact 120
 ttcaggaaat aaatgacca caattacca gtgaattcca ttagtgta agaataattg 180
 caggtaactt ctcatgtaa ttaccatgaa attgagtata atttagagaa taaaatcagg 240
 aacatactcc taattgcttt ttgatccat taagcatcat tctcaatctc tactaaatg 300
 cttgggtgcc tcaaactagt tttgnttat aggctagatt ttaaaacact gntttattat 360
 aactctgtta atgtatctct acatagcact ttaaggcag atgtgaagag atcaactgga 420
 ataagctgcc aaccatttat atacnatata aatattttgg ccaagaatgc agntttacca 480
 gcttaagcct gggctntaaa cccatcaacn tttctatgat aanccaggga cttttaag 540
 gttctaataca ggtttaccta tn 562

<210> 8992

<211> 565

<212> DNA

<213> Homo sapiens

<400> 8992

```

ctgtaccact tttagcagca gatgaaagag tttcttttcc tgcaattgag acagcactgg   60
tatgacttgg ttttctgttt gcaccacttc cattggttat acaggacatg ggaataactg  120
ctcgagggct tggttggcct ttacttgaga ctgatttttt cactgaggcc acatgatctt  180
cagagattgc aagacgcctc aaaacatcag ccaaagccgc ctttagcaca gtgatttcat  240
cttcttggtg ctgaactcgt gactcaagag ctgacaggcg atcttgaaca tcagaagtac  300
ttgcagcaga aatactatca tcgagactgc cggcgaaacc gtcgagttgc acacaagaaa  360
ttaagggact gttcctcatt atgacttaga aaaggcagca cctctctagt agactaagag  420
catgtctgga catccactgg tagtggttaag aaaacnggan tttttaaaga agcacaccat  480
tggacttggc aaactgaagt tttcttaatt aaaaattttc attnccattt ggggtgaaang  540
gtttttaata gagtcnnttt ttttg                                           565

```

<210> 8993

<211> 577

<212> DNA

<213> Homo sapiens

<400> 8993

```

gtgcctctag tgcttgctgt tttgcataaa tatactctag cttcttcagg accacttctt   60
ctgtcttacc tgaaagagac gatactttcc gtatcagaat attccgtttt cgagtcagga  120
gatttttctg tccatcaat ttgtctgcct gatctggttag tccctgaatt tcactgaagg  180
ctcgagtaag aatgagactt ttggaaacct tggaagaatg aagtaatccc aatgtgatct  240
ttaatttctc aaagagatcc ctcatctcac cagccgccg ccgtcattg gcagtgtgtg  300
tccggcgata ataagcaaac gcttctgctt ctttctgtag tttgtcactc cagtaatcag  360
gcttcagttt tagaggaatt ggtggagcct ttcgactcct ttcagctgct ttttcatctg  420

```

cagagatgtg agtacaggac ggctggttga atgactgtgt gtgggcccgc tgtggncctc 480
 angtgaagta ccattaattt cctctggaga gctcttntac aggcttaatg nccacgggct 540
 nctcatcacc ctcaaggant ctaccccggt attcttt 577

<210> 8994

<211> 500

<212> DNA

<213> Homo sapiens

<400> 8994

gagacggagc ttcacacttg ttgcccaggc tggagtgcag tggtagcagc tcggctcact 60
 gcaaactctg ccttctgggt tcaagcgatt ctcccacctc agcctcccaa gtggctggga 120
 ttacaggcgt gcaccaccac gcctggctaa ttttgtatit ttagtagaga caggatttca 180
 ccatattggt caggctgggc tcgaactcct gacctcgaat gattcacaca ccttggcctc 240
 ccaaagtgtt gggattatag gcgtaagcca ccacaccag gcagcgcacg tttttttctt 300
 tttttttttg acacggagtc tccctctgtc acccaagctg gagtgcagng gcaccatctc 360
 ggctcactgc aaccgccaca tcctgggttc aagcaattct tctgcctcag cctcccaagt 420
 agctgggact acaggcgcna gccaccatgc ctggctaaan tttggatttt tgggagaaac 480
 angngnnan cctattggcc 500

<210> 8995

<211> 543

<212> DNA

<213> Homo sapiens

<400> 8995

cctcttacat ttcaggtatc attttgcttt ctgtcttttg gcaatccact cgcaggaagt 60
 tactaaccac ccttattggt aatacctatt attcattccc tggccaatc tctcccctta 120
 gctctaggat aaatatggcc aactgaccac caatccattc caatctttaa ataccctgag 180

aattgattat ataatcttcc ctccaaatct gctcttcctc tatttaccta tcttggttgt 240
 catccacagt cacacaaaaa caacttgga gccaactgag ctcttccttc accctctgca 300
 tggccctcca tcaaatttat tgtgaagtcc ttagaaattc tgtttcttcc ttcacttcca 360
 tccccactgc ctgtttgttc ctcatcatgg tgcatgaact cctgtcagaa ccttgtaact 420
 gacttccta catcctttta acatgnggat atcttcctaa agttcaacta ctaatcttcc 480
 tttcaangna ccaacactgg ctttatggat agnatctaaa ctncntggna agggaatcaa 540
 agc 543

<210> 8996

<211> 562

<212> DNA

<213> Homo sapiens

<400> 8996

cagatttgaa ccacacaatt tattaacaag catgatttgt ggccctcggtt ataaccagcc 60
 cccaccccag cacttggtgc acattctcct taagcgcaga atttggcctc aaggtaatat 120
 ttttaggaata aataaaaaga ggccggggcac ggtggctcac acctgtaatc ccagcacttt 180
 gggaggccga ggtgggcgga tcacgaggtc aggagtctgt gactagcctg gccaacatag 240
 tgaatcaccg tctctacca caatacaaaa aaattacctg ggcgatgatg cgggcgcctg 300
 taatcccagc tactcgggag gctgaggcag gagaatcgct tgaaccagg aggcagaggt 360
 tgcagtgaac ccgagatcgt gtcattgcac tccagcctgg gcaacaagag caaaactctg 420
 tgtcaaaaaa aaaagaaaga aagaaagaaa gaggattaaa attnccctta ngnctggacc 480
 ctttgatcaa gccgatgct taacgggtgg tggtgactga cagggggttn aangggcccg 540
 ctttgccgga ggngancctt ca 562

<210> 8997

<211> 556

<212> DNA

<213> Homo sapiens

<400> 8997

```
gaggctaaaa tcatttaatt atacacaggc cacaattgca ggatggaaag gcagtgggca 60
cttgaagtg actacacatg gcaataagca gcctatcttc ttaccaacc agaagtttct 120
tggggcatgt gatggtaggc cagacccttt ccaagggaat actactacac taagcctaca 180
ctgtactgtg agagtcattg tggaacaagg ccacaggcag tgggaggaaa tgtgatgact 240
cactngtca gaattctaag gccagcatg atcaggatgt aaggctccat aattttctaa 300
accagaaatt atgagaagaa caaaattctg caatcactta tgntnttttc ttcttttttt 360
ttttgagac agagtttcac ccttgttgcc caggctggan tgcaatggcc aatcttcggt 420
tactggaacc ttcggcttct ggggtcaacc aattttctgn ccaanctcct gagtaactgg 480
gaatacaggc atgtgcccc acgcccagtt aatttggat ttaggaaaa aaggggggtc 540
tccaggttg caggcg 556
```

<210> 8998

<211> 568

<212> DNA

<213> Homo sapiens

<400> 8998

```
gaagacaaaa caaggattta ttgcctctg cgggccttga tttcctaag atagaactcc 60
aactctttgc cctctagcac atagccatct gctcgccac actgtcccgg ccttgaagcg 120
atgcacgcaa gaagcttgcc ctgctggaac tgctcctcca ggagactgct gattttggca 180
ttctttttcc ttcatcgta ttctttctga attttttag atcgttttt gtttaaaatc 240
tcttcttct caggagtcag cttggctccc ttcttgccgc ccaggggcag cgcatagtgg 300
gactcgtacc actgtcggta cgggtgtgct ncgatgagca cgatgcaatt cttcaccagg 360
gtcttggtac gaaccagctc gttattagat gcattgnaga caacatcgat gatccttggt 420
ttacgagtcc acacttttga gccccaggag aaatttccca cgtccaacct canggcacng 480
gatttcttgg taccctnccc ggacacggct ggggtgatcc cgccgggggc caacttgggg 540
gtngcaactt gggcgcccc aacttaaa 568
```


<210> 8999

<211> 538

<212> DNA

<213> Homo sapiens

<400> 8999

```

gatcgtaaac tttattactt ttctatttgt tgtcctaatac atgtaatgca ggggttgaga 60
gttcctttac tgttttgcaa ctcccttttt tttttttttt tttgaggcag agtctcactc 120
tgtcacccag gctggagcgt agtggctcga tctcggtcga ctgcaacctc cgcctcttgg 180
attcaagcag ttctcatacc tcagcttccc aagtagctgg gattacaggc atgtaccagt 240
atgcctggct aatttttttt tgtattttta gtagacacag gatctcacca tgtttgccaa 300
gctggttttg aactcctgac ctcaagttat ccacctgcct tggcctccca aagtgtctggg 360
attacaggca tgagccacta cacttggcct ttgaaactta cttttacaaa agatagggtca 420
tttctctnct gggaagacca gcgaacatnc cctgggttgg anggcctnca gctnttticaa 480
aattttgagc ccanggaaaa ctggctaaag aaatggaagn ctggtggggc cccnaagg 538

```

<210> 9000

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9000

```

aaacaaacaa aaaagaagtt tactaaattt aaacactgac atcctgtgaa gatgccagtc 60
tttacaggcg tttgtaaaag tagactgtgg ggagtatgtt acactaatac aaagttttac 120
aatgaatac aagtgaata tataaattac aatgaaatag aggaagattg tggctctgtc 180
ctgggttggg tcttttagca gtcattatgc tgtagagaaa ataaaatacc attaggctat 240
aatcaggata aataacgatg acattttagt cttttaagtt cctattttta gcaaacataa 300
acagactgat cttagcttca gcaaagctta ggccaacat acttagggct tggacaatgc 360

```

tcacaaaatg tttcctaaac aaaccagat cccttgtctt ccatgagtaa aggctgcaga 420
aagggcccat agaaactgca ggatctgatg gtggggttgc tttgagtga tttgtgtggg 480
ggtttaatct tagggattaa aagatatggc ntggaagntt cacactggta tgaactcaag 540
gngggnaacc ttcaaatnaa 560

<210> 9001

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9001

attgcagtta aagggccatt gccagtcagc tgaagaagga aatgtttgct tctcccttta 60
aggtgttaaa gtaatgcaca gaaaataaaa atagcagcca cataaatctg cacggcattg 120
cattcaagca aaggacaata tgagtaactt agagaaatag ccacattcaa tgcacttaat 180
gaaatcctgt tttctttgga gttacatgag gcagcagtac tagctagtgt ctgatattgc 240
acttttatag cataaacaca gctaaacata gtgttaaaca ctgacagcat cagtacctgt 300
tctaattgca tcagtgttta cctctcagtc tagcatgctg actatagtcc tatgctttaa 360
aaggttataa ttatttgaca gttaaggcat tagaggaaaa aggtttaagg ctatcataat 420
atatataagc attcacttct ggtcaagtta gtgtattggt ttctagaata cactggttca 480
aatggctcac ttctgggata ttaaaaacta tgggaattct cttattaaag tccaaccatc 540
attatgaaaa aagtccattt aaann 565

<210> 9002

<211> 561

<212> DNA

<213> Homo sapiens

<400> 9002

ggcaatcacg ccgtttattc gcacttggca gcaagacaat ggatgatgtg ggaggtgccca 60

ggccccctggg ttggcactaa tttggagtat ggttgagaca gggctggaga gaggcattctt 120
 agaggtggcc cccaaatccg caatcgggag aaaaaggcaa gaatcgacta gagattgtca 180
 ggataaaggg aggcactgcc caccctgct atgtctgtct gccccacag gggcttcttt 240
 aatacctggg gttccctggg tgatgaatgt cctcctaccc tggcaagggg ccatacctgt 300
 cgccgtggcc ccataggcaa ccctgatgaa agagtatcat ttccaagggg gcttttggttt 360
 ctgggtggcc ccacctcgtc gtggggtaga tggcactgaa atgctaactg agcgagccct 420
 gnaagtcacc agggggctcc ggaaggtcac ccctgacgtg gaaggcctga natcctgagg 480
 cccatttntg tgggggggca ctggtgccct ccttgggccg ggccaatggc taccctgggg 540
 gtaggtggtg gcgtcacaaa a 561

<210> 9003

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9003

acattgtctt aaaaccaggt tgtttattgg tacgtacaca cccacactca caccacacca 60
 cacacacca tacaccatt cctgatgcac tgagcaaata cagtactgag aagggacctg 120
 atgagatacg ggaggctggt gtggagggtc cgggtcactg gtgactcgcc aaaaaaaaaa 180
 tatattgact atgaggcaag ggatacacca agacaacagc cttccatcac tgtttgcaca 240
 gaggttcttt cttaacacct ccctgcaaca cttctcaagg tgctctgaat ggaccagct 300
 atcctggcac agctgctgcc ttacgacatg gccaacagtg gcaggagttg tagaggggag 360
 aggtctggac tgagtctccc ttacagccag cccatcaaga gcaccctgaa ggagtcagat 420
 ggctatgcat tgcccaactc caccaatctt aggaatctcc atcatcttac catncattac 480
 ccaagggatg ggagctggtt atctccatcc aacttaattt ctgntaataa tectcatttt 540
 cacttccaag naanctgatg ggagg 565

<210> 9004

<211> 538

<212> DNA

<213> Homo sapiens

<400> 9004

```

aatgagtcag ggtctccctc tgtcacccac actggagtgc agtggtgtga tcacagttca   60
ctgcagcctg cagcctcgaa ctctgggct caggcaatac tcccattca gcctcccaag  120
tagctgggac cacaggcaca cttcaccatg cccagctttt taaaacatat tttttgtgaa  180
gatgcggtct cattatgttg gccaggctgg tctcaaactg ccggactcaa gtgattctcc  240
caccttgttc cccaaagtgc tgggattaca ggtgtgaccc accttgcctg gcccggggtg  300
tctttttttt ctgagatgga gtctcactct atcgcccaag cctggagtgc agtggtgtga  360
tctcagctca ctgcaacctc cacctcctgg gttcaagcga ttctcctgcc tcagcatccc  420
cagtagctgg aattacaggc acacaccacc atgcccggnt attttctgga tttttaagta  480
gaccaagggtt tcaccatggt gccngctgg nctnaaangg gggctttaac tnncatgg   538

```

<210> 9005

<211> 553

<212> DNA

<213> Homo sapiens

<400> 9005

```

ggtagagact gggctcttgct atgtttacga agctggtttc gaactggaac tcctagcctc   60
aaataatcct cccacatcac tgtcctagaa tgctgagatt atagacatga gccaccctgc  120
ccagccagct gatccttttt tttaacctat ctatgctttt gcttgcatac ccacttaaca  180
tttctagttg atcatctttg gtgaaaacta caaaaacaaa ggagaaaagg gcagattgaa  240
agctccactc tcctaaaaat gtaaacttat cacaagaaaa tgccaggttt tgtatgtacc  300
attcgcattt tgggtgataat taactctctg tagaaaattt tggaaatcta attaattagt  360
accttcaata cctttagttg tctccacac acgcgtgtgt gtgtgaaatc ttctacaata  420
tcttcccttt tttagaccat gttcactgtc aaaaangtgc ttttaagagca gtctttggct  480
gggcacggtg gctcacacct gnaatcccag cctttgggan ggcnaggcag cggatcacga  540

```

aggtcaggaa aca

553

<210> 9006

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9006

```

acaagccatg aaataataaa acacagtcaa ggttctctcc atgtcaaacc accagcatcc 60
ccacctgaat gccccggaag tctgacggtt aacctgtgca ggccctggtc aggcctgtgg 120
tccccagggt ctgccggcag caaaggcacc acggaagctg caggggacag gggaggccgc 180
tgcttcttgc atttttgtct gaaaggtccc tgtggagtcg acgagggaat tctcactgaa 240
gcagctataa aagaaagcgg agggcacggc gcctccctga agcaccagca gctgttctgt 300
agacggttgt tgggccacac gcaaaggact tggttcctgt cccagctta gtggtccgtc 360
agaggaaagg tctcttctct cctggctggc cacagcatgg ccgcctcttc catgacgggc 420
acctgtgtan gccagcctct ctctcctgcc gccctgctgg gacggaagcc cggacgtacc 480
tgcacaagcc acaagtgccg gtgcttggct taaacctttt gngagctcat ctttcttggg 540
cttcttcaaa atatccctga 560

```

<210> 9007

<211> 554

<212> DNA

<213> Homo sapiens

<400> 9007

```

ctctttcttc tagttctcgt tggattctc tcctcctttc cttttcgtc tttcttacgg 60
cttgttctcg tcctctggaa gataccgtgg gcacgggagg gttgcagtta caaggcacag 120
ggtttacacc tgcacatctt actggtgact tacgccttgg agacaaataa ggccaacgtg 180
tttcttttaa atttcttca tctgcttga tgtctgccaa aatttttct cttttaatag 240

```

atgcatgtgg agatgcatga agatcaaag gtttacacac tgtaagagt tttggagact 300
 tgtgttctga gaggtgtttc tggatatctc caggaaggct ctcaaatca ggagttgggc 360
 acctaaccct gtgttttacac ttcaacttta cagcctgttc aggacacctg gggttcctgc 420
 atccgcaagc tgacctacaa ggcagaggag atgagttctg taaatgctcc tgggctctta 480
 nctgngncta aggttccata gaagtcttct tctttaactt ggcantggga gttgaacct 540
 aagtagaate gagg 554

<210> 9008

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9008

gnttttgacc tagttttatt aaatattgct tccttgggt gtgtttataa caactcccag 60
 aacatttcat gtaaggattc aaagcggc tattaataa cagcttcaat ataaagtta 120
 tcacagtttt acagtattca aaaatgacag acctgcctta aaaaacaaa caaaaaccaa 180
 aaaaggacta ttacacccaa aacataagaa aacaattaaa taaacaagtt tggcattttc 240
 ataactttat agtataaaac agaattataa atttattact ggcaaacgga cactgattta 300
 tttcctttga aatgtgtccc atttaaacc actatacaag ttattatac aaaagatgga 360
 tgatcatttt gatgaaagaa gtgcaccctg aaaatttttg ccagtttaga atatttagct 420
 cttaaagggt aaaaaaaaaag ctttttctt ttttaactg aaggctgaat tcagaatttt 480
 tttggtggct catctgncaa gcctttctgg gttnaaaacc atngnggcta ttggccccc 540
 caagggggca nggaagaata ct 562

<210> 9009

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9009

```

aatgtcttca atttattatc ttttccacag tacacatttt tcacaaaccg taaatccttt 60
gcagttattc aaagtgtgta aacaactgcc tgaatcccca tatcccccca cctcggctta 120
aggttgtgaa tgttttaagt ccttcaatca agtttcaact cttccacttg cataaggaat 180
caagagcctt ctctctttta attatgtgtg ttttatcata cagcctacaa tgcagtaaatt 240
cacagtgaag gccctgggga aaacaaaaca acatgatctt tacagcggga cttgaaactt 300
cacaatagta aatgcagttc aagaagcttc ccataataaa agcgcggtt ttcatttcca 360
gaaatcaagt caattagaaa ccctaggttc tacttaaaaa cccattttga tctaaaagt 420
aaaacagtcc cctatccata ggcattttat aaactctata cagtttact tgcagagatt 480
ttttttttt ncagctngga aacagtnntg gcgaagggtt agcccgggat gccctggaaa 540
nctggtnatg gctcaaggat 560

```

<210> 9010

<211> 487

<212> DNA

<213> Homo sapiens

<400> 9010

```

aagcaacgca cttttattac cttacagtca aggggggtcag atgtctgagg nggggtccca 60
gaactaaaat ccaggtgttg gcagggttg ttcctcctgg aactccagg gaaaaatcca 120
tcccttgctt tttctggcct ctggcggcac ttgcactcct tggctcctg tcccttcttc 180
cgtctttaaa gccagcagcg tccccttggt ctgtctctga ccacggctgg gaaggagtct 240
ctgcttttgg gcacacgtgg ctaatccagg ctaccctntc actgcagatc ttcaactcaa 300
tcacacacct acaaagtcct tttggtctgg gaggtaacac tttcccaggc tccagggatt 360
agggttggga catcttgggg actttattct gcccaggaaa ggtggtatca agggagtctg 420
agcatntgaa ccttcccang ggactgaagg aaaggccttn agnggcctct tcctcctcct 480
tannaan 487

```

<210> 9011

<211> 541

<212> DNA

<213> Homo sapiens

<400> 9011

```

acaaatacca aaagatttat thtagacaat ttgtttacac aattatacac attatgatac   60
acgtttgaaa cattaacaca cgtggagact gctaaatcat ttaatatctt ttttgcaaaa  120
agataatttc tttaggctgt gatacctgca ataaccaatc tgttctcatt tggatcagat  180
ctttctccct ctgtcctgga gatctcacag ttcactttgc tgaagcaatc tatccacttc  240
cctatcgacc ttgcttatag cagttcaggt atagactatt tgagccttat atactaaact  300
gttaagccag tgcgtgccct atgccctgct gagaatagat tccttctgta cttgcagccc  360
tcagatgctg aattgatcaa tcaatttttg agacggggtc tcctctggca ccagggtgg  420
aactggtgca ngtcctccag ttgcnngcaa aaggttggca gcagaggaga atggatgatn  480
ggcacttngg cttggtggca actgggcaac acgtcctnna tggagncccg gnattcctaa  541
g

```

<210> 9012

<211> 537

<212> DNA

<213> Homo sapiens

<400> 9012

```

gcttggtaca atctatacat tttatgtttt ttaaccactt caaagtaagt ttcagacacc   60
aacacatttt ttaaagatgc cctaccattt tttaaatgat ccctaccaa atggaaggct  120
ggatatccaa ggttttggtc catttctcaa ttctagtctg tgaaattgaa gtctgatgac  180
cactcttaag agggctgttc attagggtgc gggctgggca ttatgagtgt gtttttcatg  240
agtcagtgga aggaggggct tgttgtgagc agtgcattgag aaaaacggct tggctttgct  300
tctttttcca gctctgtggc cttggtcagg ttaccgtctc ttcagtatcg taacttttac  360
gtctcactta cggcattcgg tggcatggat tgtacaggca gctggatttg ctctcttttt  420

```


actctactgg tccttctcca ttinggctcat gaaaatagnc tntccaagg ttttggcctg 480
ggtttctntt gggccatgga ggatggcttn aggttgggan atcctggaag cggatnt 537

<210> 9013

<211> 520

<212> DNA

<213> Homo sapiens

<400> 9013

caccaagtca tattttaatc aagtactca gaaccaatit aaaaaattat aaaagtaatc 60
agaaataaat atttatgtnc agacgaagaa tgatatgagt gagaacacat ttattgtcag 120
agacaatatg tattcatctg ttctcacact gctatgaaga aatatctgan actgggtaat 180
ttataaagaa aagaggctta attgattcac agttccacat agctgaggag acctcaggaa 240
acttacaatc atggcaaaag gcaaaggaga agcaggcacc tttgtcagat ccgggggtct 300
gggtctagcc catgctgaag tatgaggga gtgggtggat gggcagaaag aacactcagg 360
gggccttagg caggatgaata tggttttatt cagcagcagc tctcattaac aactttntca 420
cactagctct ttatgctggc ttnctgnct aactgcttga gctagnngtt ccacatacag 480
ntgnccagcc ggtttggcct gctttcgggc acagtnact 520

<210> 9014

<211> 578

<212> DNA

<213> Homo sapiens

<400> 9014

ggagtaaata catttattga taccatttc atatatagtt caatgaaata atctataaat 60
ataaaaagca tttttctttt ggatatcacc atgggtccatg taaatactca agtcagaatc 120
atctgcagga agcactcaa gtcacactgt tagctttaca gacctgaata tacatattgc 180
attaacagt ggcacttatg tactcaagtg gtccagtggc tttggaatat atgtctactg 240

ggcatgtgga atagaaataa tgtgttaggt ttaaatacaat ggaaagggt tcaaccatca 300
 aaaaaagcaa caattatgaa ttcataatcct aggcaaagaa agtaccacag ttgacacttg 360
 gtgtcagaat actggagaca aagtatgtaa aacaatgcct gttgcagcac cacgtgctca 420
 ctccaactcc cagtggacag tcccccaatg ccttanggtc actcgtgggc aaccaaatgc 480
 aatcaagaag ctcgatagct tanaataaaa ggctgtaaag ctgatatcaa gattaaggaa 540
 gcttaacant tcagngcnca tgagttctcc ctanaang 578

<210> 9015

<211> 573

<212> DNA

<213> Homo sapiens

<400> 9015

caataacaaa aggcttaaca ttttatttaa aaaaattaga atatcattat ttcattattg 60
 taatgggacg aatcctccct cctttctgcc ctggttggag agaaaggagt gcagaactag 120
 ggtaatggcc agttggggag tgagggtagt gtgcacacac aaaaaaccct agggaggtct 180
 ctctgcttt aggctgcttg tcttgtgcag gttgtcaaag tctgggacag acgtgcatgt 240
 gctatgtggn ggtacacaat agttcgagtc tgttttcggt tacaatcct catcaaagag 300
 ttcattgagag agggttactt atctctgttt cacagatgag taaaacgagg cttaaaggct 360
 aagtgcattc cctatgtaaa aatgctggat ttcagccact gtgtgcagtc aggtgctggg 420
 cctgggttcc gcaagtggac actggangcc ccttctcatt aatgtagcac agccacattg 480
 agggcgggtca ttttggcagg gtaaanatga aaaaagtcn anaagggcaa nggatatcct 540
 ggggggcnta cctttaggcc tttaggngtt ttt 573

<210> 9016

<211> 575

<212> DNA

<213> Homo sapiens

<400> 9016

```

gaaattaaca aactaat ttt aaaaatcaac acctgactgg ggacctgggc atacaaactt 60
cctttagata cagttgagaa gaaaacatca cttttttatg aagcccctct cctgacaggg 120
gactggagga ggaacaccat tatgcattgt tatcagcgtg gtgtaatttg actgttgaca 180
aagtatccgt ggcagtgcca atgagcgcag ttagaagtgt ggcggattgt aatcaagaag 240
atgcttagct gtgcaacact gcatctcgag cagatttgaa tcaacattgc ctttaagggga 300
cacacacaca taccaaaaaga aaaaaaatcc attaat tttt agaggga aaa ttagagtggc 360
acttgatgaa gtgaaatttg acatgcgtta attggtgtgc agctctccta attagagatt 420
ttcaaattct tttactgntg ncacatgaa tggcacattg cnttgctgga caaatnctaa 480
aattgcaaat tggcttggtc cggaagtttt acgtttgaag ataccctgga tccttaagcc 540
attccaaagg ngggccantg gaaanana tactt 575

```

<210> 9017

<211> 585

<212> DNA

<213> Homo sapiens

<400> 9017

```

gcatcatcag agggttttac tgaacttaca accgacttgc ccgctcagta tgcagttcag 60
atgtgagagg cgcttctctg tacagcagcc tgtactgtct tcaatcctat gcgtgcaggt 120
gtctaccaca ggcaaacagt tttctcccca tttttagta atgcgatttt cctattagca 180
aaaagaggtc accagcccct gtagacttaa gggactcaag tcacaggatg gggatttcct 240
cttaatat tttttttgt tgtttgaact cttgatgcaa cattgtagag cagggtgttc 300
aggacctgct gtgcccagg gactgataaa ggaaaaagct ctatttattc tttttgtgat 360
ttgatgcaca gatgaaaaac ttaacacaca ataacagaag ttggtcgtta ataaatcaca 420
tcctagcttt caacgcttnc gtaagcagac gacatcttca gtttctagct cttgnagnnt 480
caacactgca catcaatgat gcatatgtcc agaatcagta ccaagacat tcgaatcttt 540
tcncttagtt aaccaatttt caggnntntt gggcccaaag ntttt 585

```

<210> 9018

<211> 570

<212> DNA

<213> Homo sapiens

<400> 9018

```

ggagatggag tcttgctccg ttgccagga tggagtgcag tggcgcaatc tcggctcact   60
gcaagctccg cctcctgggt tcatgccatt ctctgcctc agcctctcga gtagctggga   120
ctacaggcgc ccgccacat gccagctaa gtttttgtat ttgtagtaga gacgggggtt   180
cattgtgttg gccaggctgg tctcgaactc ctgacctcaa ctcatctgcc cgcctcggcc   240
tcccaaagtg ttgggattac aggtgtgagc caccacgccc ggccaacgtt ccattttaat   300
taacttaaat acgagcagcc acatgtggcc tctggttcct gccacggact cgggagcaac   360
ccctcctggt cgcggcttat gcgccttctc tgtgtgctgc tggggttaag tttgcatgta   420
acctcttgag gacccacagt gtgcattcct aanggggtgcg gncttccgtt tccgtatgaa   480
tggaagaag tncacctgn tgattcttgg aaagagctgt gaaggatggg gtaaattctt   540
cttactgntt taaaaaattt ntgggangn                                     570

```

<210> 9019

<211> 576

<212> DNA

<213> Homo sapiens

<400> 9019

```

aatttttata gcgtctttat ttggatctag ctctttcatc ttgtgtaact cttttaagta   60
aatgactcct cccttctggt acaggttgaa tatccataaa aggggtgcctt ggcatgtgct   120
cagtcctgaa attctacttt gatctactgc tctcatcttt gaaactgctc taaacactcc   180
cccaaattat tgatcctatg ggcctgatta tgaacttggc tcttctgaca atacttctca   240
aatcctgtac ctttggtaac atctctcctg actggcagag taccagaca ctttaattaat   300
gctgatgaaa attaagattt aagcaaagaa gaaattggtg taagaatgca agccttagga   360

```

tctgaaactt gatgactgtg ggatctaact tctgcttctt ttgctacaag ctctgttttt 420
 gaataatcaa ctttcaaaga caaattgctt gatgaatctc tgnattgtca gaatggttct 480
 ttgatttccc atcaaaagcc ctgtatgtgn actagnaatt aggacctacg anctggatat 540
 aaatatcant attttaggag cccttatttg gtttgg 576

<210> 9020

<211> 563

<212> DNA

<213> Homo sapiens

<400> 9020

ccattttact cttttttattc tgctcattaa tgatctgaaa gaagaagatg gggaaaaggg 60
 gattccacca caaggctcca aagaaccaag agtgcaaadc agtccatttc actttcactg 120
 tctgagatag ggtctctaag acccaggata caagggtgga atgtagctat atggactcga 180
 tttgcttccg gaccttttcc agagcctttc tgtccaattg tcgctgacga atgatgacaa 240
 gacaagcgaa gatcagggcc acacacacga cagccccctc gaacttccaa aataagcgtt 300
 gttccatcaa agctgagcgg cagcttttga actcatttct cttagatgag ctgcatgtga 360
 ttttctctac atatcctgng ggaccacact caggggtagt tttagcccgg aaattagagc 420
 atggagagcc tcttctggtc cacaaacttt ttcaccagcc acatgggcaa atttgagggc 480
 ttgctgacag gttctttttc tgcacgggag cctntgnttg gcanaacntt tangggnaag 540
 tccngagcaa cccccaaggg ggg 563

<210> 9021

<211> 579

<212> DNA

<213> Homo sapiens

<400> 9021

aagattagta actatgactt acatatgtga tccatgtaag tcacttagca cagtgtctggc 60

atgcatgctg gctcaaaaat ggcagctctc atcactatca atacaaaaac ataaagcaag 120
 acattctctg ccctttcttc ttgtttctgg atgtataaat gaatatttct ctatggagga 180
 aaagtcatga acatgagggt aactccacga cacaaagtcc atggctgact tcccactcct 240
 tagccagatg aaaggtcaca gcttagagga acgggtcttt atgtgcttat gacttggtgt 300
 tggaaggagt tccctgacca tgggagagct cagctctgtg atgatttagc aaagcaattc 360
 agaatgaaat ttggcctggg tataactaa attaatgtac caaatccacc tacctttcta 420
 gctaattgggg aattatgaag gttgccttgg aagaacaaat atttcccaat agaattcacc 480
 ggggtcccacc aaaacagtca agaatttggg gttctggggg gttgccatt ntcccgaatt 540
 ggaancctac ttaactttat tgggggtctt aaagctnaa 579

<210> 9022

<211> 556

<212> DNA

<213> Homo sapiens

<400> 9022

gattgaaaga ataaatttat tcaattggct ccaatgtaat cctattgtca ccagatcatt 60
 gacaccaa atgtattttt ccctttgcta gtaaaggat aagcagaaac aattgcaaaa 120
 gaacacataa catctagtag ggataatgat gaaagccaaa aatggattat ttgaaaataa 180
 ttttggaagt aaaaaaacca taggtgtgag gaaaaagag agaaactaca aataaactgc 240
 attgtgataa aacaataaag cacatagcta aaagcctatt aaggattttt taaaaattat 300
 attttgagaa acacttgggt ctaataattt tctcaaaagt caaatatcca aaagtcatac 360
 agaaaataaa acaacctact ttccatcaaa agtttcta atttattctga gaaaagataa 420
 cccaagaaaa caattttaac tccagaaaca atgggtagcg taaaaattan taatcaaaag 480
 ataaccctgt tntaggnctt acaacttata accatttctt catacaatct catatttaag 540
 gtcattcngg tgatat 556

<210> 9023

<211> 479

<212> DNA

<213> Homo sapiens

<400> 9023

```
gtatttcagt agagacgggg tttcaccatg ttggccggga tggctttgat ctctcacct   60
tgtgatccac ccaccttggc ctcccaaagt gctgggatta caggcgtgag ccaccgtgcc  120
cggccgcaac ttatatTTTT aaaataggct tttagatcag ttttaagggt tattttatag  180
ttaactagca gaaaatgtgg attaaaatta cagtaccata ctcaattaa aatcatgcgc  240
tacataatTT aagttctcct gttaacttct gtttgggttg aaccccgaag tacaataagt  300
gtagattctc attgtgacct acctgcccct tagggcattt tgcaaaaatt anccccTTta  360
ccaattggaa aggcagggtgc cangggcttt atggatttca tttaatctgg aanttttatc  420
ctattanacn ttgaaactgg gttaaatatg aatngnccaa ttaagnaaa tattcatnt  479
```

<210> 9024

<211> 551

<212> DNA

<213> Homo sapiens

<400> 9024

```
ccaaattcaa ggtcttttatt actagttcca cctcacaagc tagtgggatg tatctgtgtc   60
acaagctgaa ttcctcagta aagaaagctt gagaagacac taaacaagga tgttactaaa  120
agacaatgat ttgttaaaat tataaagcaa tcatcttttg gcctgcaaac agtcaacatt  180
agaactctcc accactgcgg atctggctcc ccatcacagt attattctga atccaggata  240
attacaatca catggcattt ttttctgcat gctttcttgg cccaaccct gcatgacaac  300
atatacaatt tacaagatgg gacttgaaat tccattctc acacaggata gttagggcgt  360
gttaccaata ataaagaata aaagttatac aacattgatt attataaatt atattngntc  420
ttatccaccc ccattctcct taatatggta ctttctttcc tgcagaaaac atgatgggtc  480
tatntnccan tacatcatta atgatgatta gaatgagctg gtaaagacct tggatttgaa  540
aactgtttgg g                                                    551
```

<210> 9025

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9025

```

gtttgctcat tcattcggtc atttatttac gtatagatag cttatgacac acagattttg   60
gcgtggctta ttgaaataaa atgaatgcaa actttaaaaa tttggggaac aagtttttaa  120
cattagaata taaaataagg atcaagagaa aacttagggc agagatacgc agccataagg  180
tcttaaatag cttttatagt tgaagcctca ttttgggtta aagcttctgg tagttaaagg  240
gaacaaaaag atagtgctgc agaaagtctt ggactgggaa cctggagatc agatttatta  300
ctgaccagtt ttgtgccttt tggcaaagca ctttatttct atgagccttg gtttcctcat  360
ctgngtaagc gatgggttat taaaagggat tcaatgggat atgggctcaa accttatnga  420
actccagaat ttggagnatc ttttatcctc antantagca catggttaag gggttttttt  480
gcaagncctg gaccaaagtt ttgggggttg cttcttccac cacaagcttg gggcttttgg  540
ccaaccnntt gacttntttg an                                           562

```

<210> 9026

<211> 556

<212> DNA

<213> Homo sapiens

<400> 9026

```

gtagagacag ggtttcacca tgttgcccag gctagtcttg aactcctggg ctcaagcaat   60
cctcccatct cagcctccca aagtgctggg attatagttg tgcggcctat gtgcaattct  120
gaaccagaca tgaacgctta aatcagaact agtattgcaa tagctgctaa tatttccaca  180
atgttataaa ttgcaaagtg ctttcccatc tcacttgatt aaaccaagct ccatgctaac  240
agcagcctcc tcccagggtt ctttgatttc atttttactg cagtccattc tcgacacaaa  300

```


aaccagggtg atcttttttaa aatgttgatc agatcatatc actctcttgc tcaaagtttt 360
 ccagtagatt ccattccac taagaaaaac atttaaattt ctgntggcct ntgcagggtc 420
 tttctacatt cttnctgcan gtgcttactg gcaacagtgg nctttcaatt nctagaacat 480
 gcccaacctt gggcttttca caagaacctt ggacctggcc agctttgctt gaacctttt 540
 aatccttttt aaaggg 556

<210> 9027

<211> 394

<212> DNA

<213> Homo sapiens

<400> 9027

ccttattagc cactggcatt tatcatatat ttgagacact tccaattgat tgcacaagtc 60
 agatgttgct gatgagaaga ttttgtggtt gtctgcatgg taatttaca attctatgcc 120
 aggcacctgt agtcccagca actcaagaga ctgagggtgca aagatcactt aagctcagaa 180
 gttccaggta gtgtgctatg actgcacctg tgggtggccac tgtactccag cctgggcaac 240
 atagttagac cctgnctnta aaataattaa aaattctgac tattttatta agaaaaaggg 300
 ttanttttta actggtacca nggcccctat ggacctataa nttggcaccc tgntccactt 360
 aattcttttt accctggctt tntaaggnc t ggan 394

<210> 9028

<211> 560

<212> DNA

<213> Homo sapiens

<400> 9028

ggatgatgag aaggcgtatt tatttttcac tgtacagtat ttaaaaagag aataaaaaaa 60
 tccaaatggc tgtctggctc ctgtgccttc tttgtcccca gtttgggtcca tttgtttctc 120
 taggactgac ctgccctggc ccctggctct tgttttctgt tcctccacat ctgacttctc 180

ttcattgtct cttgtcccaa agatggtctt acttctggga atgactcagg aaacaaaaat 240
 ggtctccctc ctcggccttt cttgccccag gggcagttct gggatttgag gagcaacagg 300
 caccaggaaa ggggttgggg tgggtgtccg ggatgctgcc cctggagaag gtgaagcggc 360
 ccgatgaacg cgttcatggt gtggagctcc gctcagcgcc gccagatggc gcagcagaac 420
 cccaagatgc caacttcgag atctccaagc gcctgggccc cgcaatggaa ctgctggacn 480
 aggacaaaa acgggccttc gtggangaag ncaaacggnt ccggcccaaa ctggggcgaa 540
 tancccgact acaagacccg 560

<210> 9029

<211> 558

<212> DNA

<213> Homo sapiens

<400> 9029

gaaatggaag tgtgtttaat aatttgaaac cacaggagag gtctgtcat ttattacagg 60
 gccatgtttt agctcttcct ggatcgtctc agatctgcca ttcctctgga tatgaacctg 120
 tggccgtggc agaaaccag aaatcagtag gggcttggtg tgttcttggt tgatcttcac 180
 gttaagatgc tattgagctt ttttatccat ggatggtctt ccaacaactg catccctcac 240
 agtggcctga gtggaattac cgatatgaga agaagcctgc tccaacacat atgcggcacc 300
 aaaatcaata gtcgcgcca gctcacgata ttgaccagaa tacctgatgt agccccaggt 360
 gaggagtgtt attaacagta gtccaacat acagttgaac aactggggct acaacctcaa 420
 gacctatgaa gccagtgaag gcctgaggct atgtccaaag ctncaatgcc cntgaacaag 480
 acttgcaggg gttcggaagg ngctgaaaac gtcttgtacc atgggcttga aaagtctcat 540
 aaatncctgg attcccc 558

<210> 9030

<211> 551

<212> DNA

<213> Homo sapiens

<400> 9030

gtgatctgca tgtgtgacac tgattctttg gaaataaaga gtggaagctg caggtgacac 60
 gtgaagggtt atttatgggt atgatgacc tgctctgcaa cgaggactg gcagccacta 120
 ctgaggagga ggggtcccatc tctctcctgt cggttttcac cgaggtcaca gccagacgtg 180
 gggcaaagggt gttccctgtc ctaccagcc gttcctgggc ctgccgccta ggggctcaca 240
 gggcccagga gtccccagct cacaggccag ggcacagggc caggcgcgct cggtgcacac 300
 cgcacctgtt tggttagttt tttacaaag acaggatctt gctgtgttgc ccaagctggt 360
 cttgaactcc tggcctcaac aatcttcac cttgggcttc gaaaagtgtt gggaatactg 420
 gcatgaacca ctngccccg nttgagctcc cggttttnaa cactgnacca atctngaaaa 480
 actgaccttt ttctggccta caagttatct gaacttaatg ttaggaacaa aaaacnnttn 540
 tggacaccgt g 551

<210> 9031

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9031

atctttggaa ttcatttcat taaggttttc aaaaaatata aagctcaaac gtaatcatct 60
 atgtccacca caaaacagaa tcaaataagt ggtagcaca acaaacatag tgatcttttc 120
 cattttaaaa aatataaata acaatgttca aggtttttaca gttttcttag tgtgtgtctt 180
 ttttaaggctt tatgttgcag acccttcatt aatggtaact gtacctgcc atcaggatac 240
 actgcccacc agcaaggaag gccactgtgg atacattcct gagggggaca cacactgac 300
 catgttgcct cagcctgtta aaaactaaat gatcaaacac cctncaatca gttctcagtt 360
 tcattaactt ctttctctca aagtantaat agaaaggggt ncgtgtccag cagcattcga 420
 gctctcagaa gatcaatcag gaagggcann aaaggaaaaa ggcttcctcc tggaaaagaa 480
 tttttttcct ttcancagga accaacccca nttaccnna angttcaacc aggggttgg 540
 cctgaaacat tttcaaataa aa 562

<210> 9032

<211> 531

<212> DNA

<213> Homo sapiens

<400> 9032

```

gtagtttatg taaaaattta ttgaccaa atgtagaaaa agtgatacta ttacatatga   60
tacagttgca agaatctaaa gtgtggattt tattccattg cacaatttgc tagtgtatTT  120
cctgggtagt gtggtgctga ataaatagga atagggtggc ccctgggtct tcctatagtt  180
tgaccaacag ttgacccaaa aggttatggc cttcagcgtt ttaattatat ccacgactag  240
atactggggc ctgtattctt caaagtgtgg ggctgcctat tctcccagga accaaatggc  300
ctccgtctta agaaagtatg cttactagga aataccctgc ctacctagg aataaatgct  360
acttaaggaa aaaataagag agctgaaaaa gctggtgcca ttgaaaaaa aaaagggaag  420
gaatgagatt taactgggct caaagcttnt ccgatncaaa atatttgggc atgnnttcat  480
aattgcttgc catttnccgc caaacccaan atggcattac caaanggact t           531

```

<210> 9033

<211> 507

<212> DNA

<213> Homo sapiens

<400> 9033

```

gagacagagt tcttgctctg tcgcccaggc tggagtgcag gggngcaatc tcaactcact   60
gcaagctccg cctcctgggt tcacaccatt ctcctgcctn aacctcccga gtagctggga  120
ctacaggcgc ctgccacctc gcctggctaa tttttatat ttttagtana nacgggggtt  180
taccatgtta gccaggatgg tctcgatctc ctgacctcgn gatccacca cctnagcctc  240
ccaaagnctt gggattacag gggtgagcca ctgcgcctgg ccatgcctgg ccaattttta  300
tattttcagt aganacgggg ttttgccatg ttggccaggc tggtcgcaa cttctgacct  360

```

caggnaatcc tcctgcctna gcctccacac tgctgggatt acaggtatga gccccagtn 420
ccggnccttga atccctctat ttncceccaa agaaaaatgc tgnntttaccc nccaacagaa 480
ccttccagga acattnaagn attgcat 507

<210> 9034

<211> 564

<212> DNA

<213> Homo sapiens

<400> 9034

ctatctgggc tttcttttga gctcttcttt gtttattacg tagcttcttt agctctttgt 60
cagacatgtt tgctgtatca gcttcgtgtt ctttattctc atctgtaagg gggttgtcat 120
gaagcttcaa atagatctct atagcaattc ttgctgcctt gaagtaaaat ggatgctgtc 180
gaagtacatc ttctagtttt aataagtcca catatgatct aagggtaatc ttcctcatac 240
agtatgtatg aaagtcaaac tggatcatcag tgatttctat aaaatgtctc tcaatctcgt 300
gacatttctt aagtgttcca ccaaatttat tcattgcttt ataagcctgg gcacattctg 360
tttggaaacca catgcactgc atttcattca aattctctac cgctgatgnt ccttcccttg 420
gaaactttga gcacatttct tcaagcttct ttaatcaagg tgggctttta accatgnatt 480
ttgcacantt ggaggtggan aaaccggccg gtgggggncca aggnctgggc ctatcatcca 540
ccttggaggt tcttaanatt nccg 564

<210> 9035

<211> 570

<212> DNA

<213> Homo sapiens

<400> 9035

attaaattag ttgctttata aaacattgca gatgtcataa ttgttaacat aacaatttac 60
caaactgtag ttaactgggtg cagtttgctg agcatgtttt ataaaggaaa ggaaaggaaa 120

tgccaaaacc ctggtaaagt tgttcattg cagcctaaga gaacaaagat ttgtttctca 180
gacacttaaa tcaggcaaata aaaaataagt ttccctcccc cacctgaagc agttcatcag 240
tagaaatagc ctgataaata actagacagt ctttgcactc gagagattcc acaacatgta 300
atgcaataat ggaaagggtt accttcttta gcttcaaagt tggagggtt tggtcatttt 360
aattttatat caaactaagt gcttttcaag cccgcagtat cttcactctg agataagcag 420
tcttcttcac aatgggattt ttaanatccc cangtccaat ttttagacca aagcantttt 480
aatactaggg gcacacccca tgccctgntg gaaactgggt tttcttggcc aggttttgaa 540
nnanttcaag ggggggttggg taangcttgt 570

<210> 9036

<211> 531

<212> DNA

<213> Homo sapiens

<400> 9036

actcttaact tcctggagat ctttaagaga ttctgttgaa gattcactgg gtattgaggt 60
cccatcttta ttaatttctg caaactgtat ctcagggtgt gatttcacat ttatattgta 120
ctccatgaga ggtggactta gttcttcttc ctcattctgt aactcttcta tttcaatacg 180
ctgactgcct gttattgact gtagagcaat tccttgttga tagcaggata acatcctctg 240
tatgatttct ggtactggta tgcctaggta gacagatagc tgatggtaat caaggagat 300
attctcaatg ggattctcct tcactttgtc aatatcctct tgcatcatcc caaggcgcag 360
aagaatatct gaaacttttt tccaaattga attgaactgt gactcagtga gaccattcat 420
caaaatctca ctaaggaggg atatccctgn attttgcaca gtctcangaa gntgcanaa 480
tttanaagat gtcnnaaaat ggcgggtcca tattccatcc ttttttgggg c 531

<210> 9037

<211> 547

<212> DNA

<213> Homo sapiens

<400> 9037

```

atgagaatga tttatttccg gtctggccag ctctgaaaga gacacatggg ggattcggaa 60
ctttatggca caggcactgg tgcactctgct ctctttgtcc agtcacactt gggatgctta 120
attttcctga tattatacat gcaaatacact tacttttcat agaatttacc attcatcaaa 180
tgactttcaa caataacaat ggtctgacat tctttcatgt cgtactgaga tttcagatat 240
ttattagaga aactataaga cagattttcc taatatTTTT gaagtatgag ttcctctgaa 300
tagttggtat aacatccatt aaaaaataga aaaggTTAAC tttttaccat gatcaaagct 360
agagttcaca atgaaacacc tgcatagctc tgcccaacat ctctgtaaca acagccaagg 420
gccggncttg aacatcatgc acagcaatag angnatcatc catggagtcg ancctgtggc 480
ttgccaaaaa tctggnaggn ntaaaacgcc tgaccactga attgggaagt aggaaactaa 540
ccaggtN                                         547

```

<210> 9038

<211> 567

<212> DNA

<213> Homo sapiens

<400> 9038

```

cttctcttgg ttttattgtt tggtagaaaa acaggctctt taacactgaa taaacatctc 60
acgaactgtc gctcctagat tacaaaaagt caaaaccaat ttcctttgac gccggggccct 120
tgaatctgac attcaagtca ccgtaataga aaccagagct gctgaacctt acattctgga 180
agggtgcttg acaaaggcat gttaaggacc gtttaaaaact tctagcatgt aagaagatcc 240
atctttcctt ccaacgcctt tggataataa cagcagaatc ccggagatct gctgctgagt 300
ttgagaaggc caagtttaag gattccaaac tccagccttc aatatttctg cagaaactta 360
gagaagtaac ctccccgtcc tctccgctgg ctcccccaag tacagatgca ggatgcaggt 420
ctttcttcct gctaccagg caccgaggac tnaaccattt accgncttna tncTgggctt 480
tnttcaatgg gctcttggag gaaaaacttt tcggttttgc caactttaag cccttaaaaa 540
agccttttgg ttaaaaaang gcgggng                                         567

```

<210> 9039

<211> 573

<212> DNA

<213> Homo sapiens

<400> 9039

```

ggatcttgct ctagtgtgag cactcctgaa cttcacatat tctccttgct ccaaattgcaa   60
gggtttactc tcaagagact ctaggctcac tgcccataaa cctttgagtt ggaccaaattc  120
ttaacatccc tgtggatttg ctcatactgc cctgggcaga actctttcct tctttggaag  180
tctgaattac ttcataattg acatctatct tgaaattctg ttttacaggg tttaggatgg  240
gggtaggtag gcacaggaaa gagagtagag cattctctct tttctagcaa tttccattat  300
catgcccctt ctagctttta gaccagcagt tctgagacag ggattatttg cttttgtttg  360
ataggtcagg ttgtctggga tggtttgcca atagaaattc tatagactat tattgntcaa  420
agagcaagaa ttggcttaac tctcttcact tatatgtgan gctctggcca tacttaacag  480
acaccccggt ggactaacac agatatggtg ggcctgctgg gctctttcca atgggcccac  540
acaagncnca ggnntcaaan catggcnctt ttt                                     573
    
```

<210> 9040

<211> 494

<212> DNA

<213> Homo sapiens

<400> 9040

```

ggctgtgtga agttatcatc agtgcaaata gccgagacgg gaggggagtg gagatgggga   60
acagccgaga tcagcattca tgggcatcca cggtgccgag gtcacagaag gaactgaccc  120
gagagccgtc acagggcggc cttagggttag acttgaagga gaacttccag gtggcagctg  180
ctgaggccag gacggattga caggagacgc ctgggccacg tgcccaggct cacgcctgga  240
atcccagccg tctgggaggc tgaggcgggt ggatcacctg aggtcaggag tttgagacca  300
    
```


gccggagcaa catggtgaaa ccccatctcc actaaaatca cagaaattag ccgggcatgg 360
 tggcgggtgc ctataatccc acttattcgg aggctgangc aggagaatcg ctttgaaccc 420
 nggangcgga actttgncgt gagcccaaat cgngccactg nacttcaacc tgggcaacac 480
 agnaaaactt cctt 494

<210> 9041

<211> 582

<212> DNA

<213> Homo sapiens

<400> 9041

attttttcaa ccacatttac tagctcacat aaatatittta aaacaaatcc atctgtcttc 60
 ccttttggct tccttggcac aatttatcag ttcttaacaa actaccataa atatccataa 120
 ggggaaaatg aattttagaa tatgaaagag aggttaataa atagccaaat atgtcaacca 180
 ttgaaatgac caccaatttt aagattaagc ccgatttgca acttttattg aaataaatgt 240
 catctactaa aaacaagggtt aatttataac tggatctcaa cttgtttaat agcaattgaa 300
 ttttgacata aaaattgcaa aacttcagct aaagaacaaa taaaacattc agacacaagc 360
 ttacacttca aaaattctat caacttcaac aaataatgaa tgactgnata ttaatttaca 420
 ttagtcctgt ggtctagagt acattttcca tttaaacatt tttaatagaa cttctgggat 480
 ggcatggaca gcttctagtg ggnaatagga tatagtcagg tcttgntgga agacaccctn 540
 gacaggatgg tggcnggaag ccngganaaa gcctgaatgg gn 582

<210> 9042

<211> 567

<212> DNA

<213> Homo sapiens

<400> 9042

gagatggagt ctcactctgt cgcctaggct ggagtgcagt cctgcaatct tggctcattg 60

caatttctgc ctcccgggtt caagtgattc tcctgcctca cctcctgagt agctgggatt 120
 ataggcatgt accaccatgc ctggctaatt tttgtathtt tagtagagac ggggtttcac 180
 catgttggcc aggctggtct cgaactcctg acctcaagt atccaccgc cttggcctcc 240
 caaagtgcag gattacaggc atgagccaca gtgcctggac tcatttattg attcaatcat 300
 ttatttatat cgggtgtgggc tcgaggatat ttattttatt ctttgggttg tgatccaaca 360
 ctgctttatt ttgttgctca cactgtttca gcttcagcca ctgggaacat cttccctctg 420
 catgcccac tcacatcact gnatgtataa agttctgnct tgctctctga ctctacaaga 480
 tctcagctta tcttggatac tttctggcct aagtttaaaa tcagctatht ttcaaggaac 540
 cctggttcgt ttaatggaaa anggggg 567

<210> 9043

<211> 556

<212> DNA

<213> Homo sapiens

<400> 9043

cagtagagga aaagaaaact tattaatgat gccaaaggcaa ctagttaagg caactgaagc 60
 ataaccttgt ccacattcac taaaattcca gaaggaacaa atattttaa gtaagaactg 120
 aagctagggg taaattatht ttaaaatatt ggaattcaca aaaagccatt caaagcataa 180
 gatccagagc acagaaaaaa tgagtaatac atctgactac tacataagta ctaaaaacat 240
 gtccatggca aaaaaaaaaa aaaaaaaccc acagaaaaac aacaacaaaa cagaaaaacc 300
 accaacaataa tgaaagtaag tgacaaatcg gagggaaatat ttgcaacata tttgacaaag 360
 gactaatttc cttaatatat ggagttcaaa cagattaatg aacatgatca acaggctggg 420
 tgcaatggnt taagcctgna atcccagccc tttgggaagc tgagggtggg canatggctt 480
 gggncagga gttcaaaacc agcctgggca catggnaaaa tcccattttt ccaaaaaaat 540
 tnaaaaatcn cnnggg 556

<210> 9044

<211> 548

<212> DNA

<213> Homo sapiens

<400> 9044

```

aaaaagacag agtctcactc tgttgctcag gctggagtg agtggcgca tctcagctca 60
ctgcaacctc tgcctcccag gttaaagcaa ttctcctgcc ttagcctccc gagtagctgg 120
gattacaggc acccaccacc ataccggct aatTTTTgtA ttttagtag agacagggtt 180
tcgccatgtt ggccaggctg gtcttgaact tctgacctca ggtgatccac ccgccttggc 240
ctcccaaagt gctgggatta caggcatgag tgagccactg tgcttggcct gattttcata 300
tattaaatga cctttgcagt cctgggataa atttacttg gtcattggtg ataattgctt 360
taatattgctg ctggatttag tctgccagca tgttgctcag gattttcgtt cctgggccac 420
aattctagac acaccctggg ctggaaggga acccactggc ttgaaggaaa ggaccccatc 480
ttggctgnat tcatggctgg ttaactgaan aanccttngn ccctgaataa ccngcngaaa 540
tacctggg 548
    
```

<210> 9045

<211> 566

<212> DNA

<213> Homo sapiens

<400> 9045

```

gacattgctt ttctaaagtc ttttagtatg ttctacagt atcattctca agtcatataa 60
actacttgct gtggtactaa gtattttaat atagattgtc tatcaacct ttcttaactc 120
tagaatattt ttagaaatat tcttcaacat agtatgatgt caatgcagaa atgagaaaag 180
aactaaggat ttacatcagg ttacaataca ttaatcaaaa aatacatttc tgtgcctcta 240
tgaattctta atattaattt ttgcaatttt acaaaatctt actaaaaatt ttggtatttc 300
tttccctata ttcttcaaca atggatataa gtattgttag tgcaaccagt taacagcaac 360
actctgacgt gtttcataaa aacctatact attttataaa aaatcccttt caaaataact 420
ctttcaaagt aaagttccca aaaagggttaa tttaatccct gtngacatac ttcataaaag 480
    
```

gtcagatatt ngcaatattg ccaaacttta cggacctaata aagaagctnt ttaaagcacc 540
ggggtttttt nccnggttat gcccnng 566

<210> 9046

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9046

ccaatttgta attgtggaca agtgtaacct acttatttgc tagaatgatt ggatctagaa 60
tgagccataa ccttgaaggt cgtctgaaac aaactcctct ccaactgctat cgttttctgc 120
ttgactcaga aagctctttc ttccctgggtg cctttcccag cagcatttgg gcccatccat 180
tactagagca gcaagtagag gttttggaat cagagagttc tgggtccgag ttgtgactct 240
gtacttact agatgtggta tcctgagcaa gttacccaac atctcttctg taaatgggta 300
tcatcaaaat gaattcctag gagtttgagg attaaataat gtgtatagta tacacaaaat 360
ctagcattca gagctaaatt aagagtagct aagcagttca ataggaacta ggacccatgc 420
ttcctgtttg actcttgagg caacactttt ttccatggaa agatctggct ttcttacaat 480
ggctataaaa cctttgaaaa agcactgggtg ctggaanact gggngtactn gcttggaaat 540
aataccattc ctacattntt ta 562

<210> 9047

<211> 469

<212> DNA

<213> Homo sapiens

<400> 9047

aaatgtcata nngtttactn tatttaaate ctgaggttna aaataaagta ttccacatg 60
gcatggcaga cactatgaaa taatatgctt anggatacaa aagttttcca ccccatggn 120
gcagggtggng tgctgggtatt tgatgtgctt ntagataatt ctttggcaga taagaatgaa 180

ttgggggtccc agaccacacca tcccgtaagg ccacatgaat tgaggattaa tcaattaaag 240
 tgcaattcca aatgttgagc cttccaaatg aggcttgggn attgctctgc agccaccana 300
 ggcanagtgt ctctgcatan catacatnaa gcagcctttn tcttttttta aatcatagat 360
 gcccccccaa atttcaagat gtactttatt attntaaaag tgcttaagag gaanganaga 420
 nttattaatt cagnctctcc tggntccttg gaagaaacat aatganatg 469

<210> 9048

<211> 566

<212> DNA

<213> Homo sapiens

<400> 9048

canaactgta tttgttattc atacatttgc gttggtttaa atacattacg tacaatttct 60
 acattggatt agaagaatga cacagggggc agcaacactn tcgcagccca gcctccattc 120
 cctgacactg gaggcagggc ctatggctgg canagggacg gngttccatg agtgccactc 180
 anaagcctcc cccggcattc tgggcccctg gctnttccan agtccacatt caaggcaacc 240
 tgagcacagg cttgagggan agtggagaaa ggccaggaaa ggatgcccac actnttgcct 300
 gccaggccca ggaccagctc tctcctacac tggacccaat ttccttctga tcacagaact 360
 ggtctggatc aagacaatgg ggaaaactgg ngtggaagct gtggccaggt gaggcaaccg 420
 ggcttcctgg taaaccccca ggcttttttg agccccanat gggcacttta ccaacagggt 480
 tgggtaaaaa tgttacngag agctttgccc acctngggcc ctttgggtct aaaannaagg 540
 ggcaanggtg ttttaaaaat tgtnc 566

<210> 9049

<211> 576

<212> DNA

<213> Homo sapiens

<400> 9049

gagacggagt ttcgctcttg ttgccaggc tggagtgcaa tggcgcgac tcggctcgcc 60
 acaacctctg cctcccaggt tcaagcgatt ctctgcctc agcctcctca gtagctggga 120
 ttacaagcat gcaccaccac acccagctac ggtgttttct ttagggaagc tatttcatca 180
 actatatctc agcttccacc caacctgtgg attatccctg aggctttgta gattgcaaca 240
 cggccgcttc cctctttaga ctggccatct ctacggctctc gggcatacat attcttctct 300
 gagaaattgc agccctggaa gtcgaagtgg gctgaattca aggagatgag ctttggatat 360
 agcatgtttt ccacctgggt gctctcatca ctaaagctgt ttccgtacat gaagcagccc 420
 cttttggaag catgtcatgc aggtccacat agtaagcaac gccactctct ttggggggga 480
 tggnatcang ggcttgactc tttnaagccc cgaaactggg ggggcataat ccacacctgg 540
 tgaacttttg gtctgggtggc tctgggtggt ccagct 576

<210> 9050

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9050

ctgagataga gtctcgctct gttgtccagg ctggagtgca gtggtgcaat ctgggctcac 60
 tgcaagctcc gcctcctggg ttacttacg ccattctcct gcctcagcct cccgagtagc 120
 tgggactaca ggcgcccgcc accatgcctg gctaattttt ttgtatttta gtagaaacag 180
 ggtttcacca tgtagccag gatggtctcg atctcctgac ctctgatct gccgcctca 240
 gcctcccaaa gtgctgggat tacaggcatg agccaccatg cctggccaag agtggtttct 300
 aaaatatgag cccatggtat ggctgagata ccagttgatc ataattggagt ggggtactgc 360
 aagtatttag ggctggcaag tagggaggtc tgaggctctg aggggagggg ctgggtcaac 420
 agacaggctc atanagggt caaggcagga agtgttttaa taatgttaac gagtagcatg 480
 gcataccgga acacncgatg aatgtcacct ttacctcaag gatttccgga cctnaaagct 540
 attcaaggca tccagttaan tggnt 565

<210> 9051

<211> 580

<212> DNA

<213> Homo sapiens

<400> 9051

```

cattttatatt ttanagaggg gtcccactat gtcaccaga ctggtctcga actcctggcc 60
acaagtgacc ctcccacatt ggcctcccaa agtgctgaga ttaaaggagt gagccacat 120
gtccagtctc tttttcttat atgcaatact cattatagag ctagttgngt tttcctgcaa 180
ttttcttgat acccaaaatg agagcaagtt taacttaaaa atgctgcagg gtttatgcaa 240
tgcctatcaa tgttacaatt ctgaccact ctccatattt attactctca gtattctatc 300
tgtatatttc cttatcctat tttaaactgt tttcattttc ttgtttaatt gtatatgcat 360
ctatgtattt atttccttga aaactacact tgcataaggt agttttaaaa attaatgacc 420
actggttcta cactatgcaa aatatgcaan ggaccggact ctatacaggt atctacaaaa 480
ctaaaaaaaa aaaggggntt aataacttta aaaagcccta caacctttta aaaagccctc 540
ntttnaaaat atttcatatt aaaagnaatc aacccccaca 580

```

<210> 9052

<211> 545

<212> DNA

<213> Homo sapiens

<400> 9052

```

aggtttgaaa tatctttttg caatagataa tcttatttac attaatacag aatcatttta 60
cattcctaaa tcagacacta atagatgctt tatttttagtg aattataaag gaaaacaaaa 120
aggaaactgt tgagaagtgt tcttcattaa cctgtctaac gacagcccga agatcctgaa 180
acacatggaa actgcgacat gctaccagag ctggtgaggg tgacgccgtt caccgtcccc 240
tccacatctg tctcgtcctc ggcgtagctc aggatcaggc tctgctgccg gctcgtttagc 300
ctctttggaa ctcgtatctt gatgtggatg tagtggtctc cgtagccgta gctgttaatc 360
cgggggatgc ctttcccacc catccgaatc ttctggtctg nctgagtcct aaggggggat 420

```

cggcacgttg atcgcttgta caggccctgg gcttttggtt gacccccag aaaaagcctg 480
 ggctnttnna ataanaaggc cgaaatggat gttggncccg cttcngaana aaagggtttt 540
 tttgg 545

<210> 9053

<211> 576

<212> DNA

<213> Homo sapiens

<400> 9053

aatgtacgtt ataatttatt tatttaataa acatttatta ccactataca cttctagaat 60
 gaggtggatg gtaaatacaa taaacataaa gcaatattaa gtacctaccg tgtgcaaaag 120
 caaaaaaaga catgggtccct gccctcatgg agctcacagt ctagctgaag cagacaaaca 180
 agtcacaaat acaatggcaa agcaccaggg aagcattatg gaggaaagga ttggttctgc 240
 ctggagtatg cagggcaggc ttcccagaga tggagacaat gaagctgggt cttggatgag 300
 taggagttca ccagatgaag gggaaggggg taagcacatt ccaagcagag caaacagcgt 360
 atgagcaagc agagtcttga aagcgcatgc catggtgcag gacgatgagt gttccagcgc 420
 actagagcag aaaagtgcgc caaactgaag agatgaatta ntggttgggg ttttgatgaa 480
 acataagtgt cagaaaataa attgcccatt cacttacata acttaactgn ggggtctggna 540
 cagtcccgta tcttaaaagc ctttnattca tnaann 576

<210> 9054

<211> 572

<212> DNA

<213> Homo sapiens

<400> 9054

agggaacaaa gattcatgtt ttatttccac agagaaactc aaaagtagga agctcctcct 60
 tcctggagaa ctgtcacagt gacttcaggt caccaaaggg aggaggtaca gaaagatgct 120

ggtgtatgtg acgaggctgg tggccactga agcaccacag tgcagtggga agaaacaagg 180
 agagacaagc tgggtcccca gcctaggaaa cagaggtgtg gcagccgggc cagggctggc 240
 acaggctggg ggccaagggg aggagctccc tgacgaccag tgcttttcgg ggcctcgggtg 300
 gtggttgcaa gaaattgcct accaaaactt caccactgc agcaggccag gttgcacccg 360
 ggaagccgag gaagaagggtg agactcccc ctttgcaggg gtcttgactg agtacttccc 420
 accataggca gtgggatacg catgctggtt gtaattgtag ttctgatcgg ttttgcctgc 480
 acgtttcttg aatgatgacc cgtccgacct taataaatgg ntttcaantt gaggaaagga 540
 tgtctgtttg aaatcctccc aantcggttg aa 572

<210> 9055

<211> 493

<212> DNA

<213> Homo sapiens

<400> 9055

ccaatgaatc aacatacttt attagacca ctaagtgccg ggggaggggc ctgtgcccta 60
 gagccaggtt acagggtcca cccgtagatt cagtctgggtc tctccccatc atgcctctca 120
 cttccagtct gggcttctaa taggagggcc cgcacttctt ccctcccagt cattctctcg 180
 aatggagaat ctttctctcat tccagggaca ccaaggctca ggaaggggcc tatccatcat 240
 cagtagagcc agacaagctc tcccatcgga cgtcctgtgg cggggcccag aaatgggtgc 300
 cgctgcctgt gggactgccc ttccgggagg accagggtgt cttcagtgt cttggcctgc 360
 acgtggagga nagtaggcag atgtctggtg ctctttaagc tcaaaggcat catggccctn 420
 tcggaagcag cgggcacaga aaagncccca ttgagccagc gcancgtang gnggcatacct 480
 cantgcanat cca 493

<210> 9056

<211> 549

<212> DNA

<213> Homo sapiens

<400> 9056

```

gttaaactat acactcttta ttattaatgt acatttatga aaaattctgc acagttacaa 60
aagtgcattg ttataaaatc atctccatac aaaggttggc atcttcctc taaccccacc 120
cctccccagc cctcccaccc ccagacatta gcacattaca ggacagtgc tagaaaaact 180
gagagctctg tggatccagc tctccgcca gtgctgtgac aaacacaata gtgatttaca 240
aaagacctg tgacgccctc acttcctttt tgcctcttc tgggtgggg aagcgcagac 300
aattttctct ggcttttaga agatgtcctt ttgaggaatg ggtaagata tatcttttta 360
gtcttctact gctggaaagg atgtcagcac agacacgtat agggggaaaa tgggagctgg 420
angncttccc catgggtgaa gacaaacacc tgncttggac tgggtcaaata ttcatacatg 480
tcctcctcg aanggagcca tgaaccttg agcaacttg agacctattt tgcaaagttc 540
ctgggaatt 549

```

<210> 9057

<211> 488

<212> DNA

<213> Homo sapiens

<400> 9057

```

gaaaaagtca tgaagcttca aatagatctn tatagcaatt cttgctgcct tgaagtaaaa 60
nggatgctgt cgaagtncat ctctagttt taataagtcc ncatatgatc taagggtaat 120
cttcctcata cagtatgtat gaaagtcaaa ctggctcatca gngattttct ctcaatctca 180
tgacatttct taangcttc accaaattta ttcattgctt tataagcctg ggcncattct 240
gtttggaacc ncatgcctg catttcattc aaattctnta ccgctgatgt tccttcctt 300
gnaaactttg agcacatttc ttcagcttct ttaatcaggt tggttttag catgtatttt 360
gcacatttgg agttgataaa ctggctgctg ggtccaangg cctgggccta atccatcccc 420
ttgnaggctt ctttnaaant tncagctgct tatagatttt agcttcncga gaaagagttc 480
ttttaang 488

```

<210> 9058

<211> 543

<212> DNA

<213> Homo sapiens

<400> 9058

```

gagaatgtga gattttttaa aacaaagaca acataattca ggttaactct gttgaacagt   60
caataaatga aattcatcta cacctgaata aaacatatatt acaattgaa aaaattttta  120
acaaccacaa aaagtaaaaa ctttaaaca acatgaacag gatttgtttt tagggcacac   180
aaaggccctt gcagcagatt ccaacagtag ctttactggt gtgtcttcta cagatgagtt   240
aaagagacag gctgagctcc acacaggcaa gatgactaac agggcgacag gacagtcaca   300
cagggcggag tgccacaccc ggctataatc cccagattcc actgcagagc tggctttgtg   360
cgtaggaggc acacaaagaa aggtgattca ggcagacatt attcaaagct acttcgtcgn   420
gtaccattgg aataatgggt gggnaaactt ttgggctttg gatttttttt taagttttac   480
tccttggtat taacttctta atacangncc ttaaacttat gccgctgcaa aaacctatgc   540
cgt                                                                    543
    
```

<210> 9059

<211> 495

<212> DNA

<213> Homo sapiens

<400> 9059

```

cagaccagct agatattttt attaatgata tataacctct ttaaaacatg tatatttacc   60
aaaagcattc tgatatggca ttcctctagt gngacttttt gcatgtaaat taatacagcc  120
tttttgacct tccatacagt caggttcctc ttcagtgtgg atgtttccta acgaccaagt   180
tcaagggttt tccaacatct ctttactca tgggacttct caatgngtgc tttgacatgt   240
tcccaaagng gaagctaaaa acaaagaaga atctccacac attttacatt cataagattt   300
ttcacacttg tgagatcaca gctgaatatt aagggtataag gcagagtga aggttcaaca   360
    
```

cattccttac agccagangg ccgtgcattt atatccaagg gtcacaagc tcaanagggc 420
cccnggaaaa aatggaaggt ttttcccctt cttacaatta tagnantnt nttcagcatg 480
gggtcaaacn ggctc 495

<210> 9060

<211> 409

<212> DNA

<213> Homo sapiens

<400> 9060

cttttttttt gagacagggt ctcaactgtgt tgcccaggct ggagtgcaat ggcgttaata 60
tcgtcatta cctcaaactt ctgggctcaa gcaatccttc ctctcagct cctcaagtaa 120
ctgggactat aggtgtacac caccaagctt ggctaatttt tcatttttca tagagatagg 180
gtctcccaat gttaccaag ctggtctgaa actcttaagc tcaagcgatc ttcttgcctt 240
ggcctccgaa agtgctggga ttataggcgt gagccactgt gccccgccga tttatatatc 300
ttcttacatg atacatctta ttatcaattg acaagctgnt cttttacttg aaatttactc 360
tttgggangc taggncccaa ngcttggggg gggaanggcc naagtnctt 409

<210> 9061

<211> 526

<212> DNA

<213> Homo sapiens

<400> 9061

gggtctcag ttcactcttt ccttggttat taaatatcaa cttttcctgc ctaatgggct 60
gaggntcatt ttccattcc tcaaggnaag ggtagactac ctaggaactt attgcatctt 120
taggccagct ggcttanngc taccatntg aacccccana ttactacca agtcttcctt 180
ttggcccttc ctgccctaac agcaagtacc aggccagtcc cttccccagc aaatgccagg 240
ggcttcatgt gaagaggaac tggccacaag gctgagggga ggaggagaaa ctgtttctgc 300

aggaaggaca gcagtgcctc caggctnttg ggcatnttca catgtttcta gataaaggac 360
 aagctcaact ttggagcctc tggtaggcag aagaaaggag gcaagggaag tatggcctgg 420
 gctttaaan acccggttnt ctnggatgga tccccagatg acnaaaggca aggttcctgg 480
 ggacctggag tcacaccagg gncctagcca agccttttnc tnagaa 526

<210> 9062

<211> 546

<212> DNA

<213> Homo sapiens

<400> 9062

catttttgca aaaatgatct tttattattg agctccaaga atcaagtaaa ctgcactatc 60
 attcaataat gttccaagat accaatcaat acgtgaatca ttgctttctc ttggaagcac 120
 acattttggt aaatatttaa aacttaattt tcataatgaa aatttttcaa gatagtctct 180
 acatâtgcct cctccccact taaattattt aactcttgaa ttttgatctg ttttctgttt 240
 taagaagctc ttttctactc tataactaaa aattcaaatt tatgaatcag ccagtatccc 300
 ctaagtgact atcttgggca aaactagtaa atgcccatâc tgaccacaat tattataaat 360
 aattaacata ttacaaacat ataacttttt tacctgtaaa tacccataaa ttaggtaaaa 420
 tacaaaaact ccagcaacac atatgaaaaa ctggagnagg tttggtaaâc ttgctggaga 480
 ttcatggcca ggtcccacaa cggnggcaac tggcttggat gnggggggga catttggttng 540
 ggtttt 546

<210> 9063

<211> 530

<212> DNA

<213> Homo sapiens

<400> 9063

gagatggaat ttcgctcttg tcacccaagc tggagtgcaa tggcgatctc ggctcaccac 60

aacctccgcc tcccgggttc aagcaattct cctgcctcgg ccttcctgaa cagctgggat 120
 tacaggcatg tgccaccacg cctggctaata tttgtatatt tagtagagac ggggtttctc 180
 tatgttggtc aggctggtcc tgaactcccg agctcagatg atccgcccac ttcagcctcc 240
 caaagtgctg ggattacagg cgtaagccac cacgcccagc ccatatttca gattttttaa 300
 taaccactta cttaaaaaaa aaaaaaaaag aaaaaagaaa ccacatagtt gtgattcaag 360
 aatcttcaaa tctatgcact tcaaactgaa gcaaatgaaa tacgtaaaaa tgtcgagtta 420
 atcttcttgg ctctttctna aatcaaatta caaactctta acttcnggat tagtttccca 480
 aattngnaaa agtagtctat tttaccncc aaaaaggggc cncatttntg 530

<210> 9064

<211> 540

<212> DNA

<213> Homo sapiens

<400> 9064

aatacacatt tgtatcttga ccttttcact tgtttttctc aaatatttca tttctgggcc 60
 ccatccatta cagggttacc aggaggcaaa ttttatctac ataaatattc acatgaaaat 120
 agtaacttac aaaaagaaaa aaaataaggc agcttcataa cacaattatt cttttacact 180
 tttacaata taactcctcc cgttcagaat aaatatacac ccaatgtatg gagcaggatt 240
 caaagtggat agtggcttgg ggggtgcttag acagtgttat cgcttgggac ctggagtcct 300
 gggggaggca gtggtggtct tcttagacat ggttgggatt ttggaagggt tgtttagccc 360
 tctcctggag ttgccttggc cccctgcagc gctgctttct gaagtgtcgg aacaagcaga 420
 ctgcgtctct aagangtcaa agtcagaacg tcaattnctc gccggctgct gggctcgact 480
 ccgggtcgat tccannccga ctccaaggcg actggnagac nttttanggg ctgccnaata 540

<210> 9065

<211> 553

<212> DNA

<213> Homo sapiens

<400> 9065

```

atgttttttt ctgtcagttt aatccatttt attgacttct caattaacaa caaaattcat   60
ttggacagta aatcagaaaa tactttctat ggtggcttta aattacattt ttttaacccaa  120
aaatgttata cagagccatt ttagacaacc aatgtatctt aagtacaaac ggtaaaaatt  180
cacattccct tcagtaactc tccttccact tagaacacaa tgaacttctt aggtaggcag  240
agttctcggt cacttaacca caaccccat ttagcacaga actgcagcaa aaagaattga  300
agaagtgatt agaaaggata tgcattatta ataaaccata tgctatgtga gtgttaggtt  360
cccacgaaat attttactgt atatttaaaa aaaaatccct tctcaagggc actgctttca  420
ttcaaggact gatttcatta cctacttcat tatcttttat aggggaaatg ctccttttca  480
aggtattaat acacactgga gttggtacca ggnaacactg gnctacacct ggaggttaaa  540
atnttagtgc ngg                                     553

```

<210> 9066

<211> 545

<212> DNA

<213> Homo sapiens

<400> 9066

```

gagacagagt ttcactgtcg atgcccaggc tggagtgcaa tggcatgac ttggctcgcc   60
gcaacctccg cctcccgggt tcaagtgatt ctctgcctc ggcctccaa gtagctggga  120
ttacagacat gcgccaccat gcccggttaa ttctgtatit tcagtagaga tggggtttct  180
ccatgttggt caggctggtc tcgaactccc gacctcaggt gatccgcca cctcagcctc  240
ccaaagtgtt gggattacag gcgtgagcca ctgtctctgg cctgggtctc ccatttctag  300
ctgactttgg gtgacacaag acagctgagc acatgcacct gcgcccgtc atgcacaaga  360
ccctcctgca accacagcaa aggagggagc cagggtgtcaa ccctgaagga cacaagaat  420
gggaaagggg aaggccgcan tgggagaccc gtggcatttt cngagagatc ccgatgaac  480
gtncaggaac nggctttgac tnctaaggag aggggttccc nccaagggga agggggtttt  540
cttaa                                             545

```

<210> 9067

<211> 557

<212> DNA

<213> Homo sapiens

<400> 9067

```

acaattttta atttttttta agacagtgtc tcactctgtc gctcaggctg gagtgcagtg   60
gcgcaattag aactcactgc agcctcaacc tcctgggctc aaacaatcct cccacctcag  120
ccttctgagt agctagcact acaggcacac gccaccacac ccagctaact ttttgtatit  180
ttttagaca gggtttcacc ttatttctca ggctggctct caacttctgg gctcaagcaa  240
tccaccgcc tcagtcaccc aaaatgctag gattacaggc gtgagccatt gcgcccagcc  300
tcaaaactct tctacctaaa atcaccttca gagccatgct agaaaattag tatcattcct  360
ttacaatcgg aatccaactt ggccactaaa atgtttcctt agacttggtc ctaaattgatt  420
tttggattgt ttcaaaacct gaaaaacacc ttacacaggat aaagattaaa gaatgggcca  480
ctggatctga gaacatttca aaaagaagtt ggacttttaa gcttttgcca attcnggga  540
aaatggcttt ccanatt                                     557

```

<210> 9068

<211> 502

<212> DNA

<213> Homo sapiens

<400> 9068

```

aaataacaaa atatatttcg atatgcacag ttttaactga ggacacacaa gccttcctcg   60
ggctgcaggc ccaccgccct cccagtggga ttacacagccc ctgcggagtt tgctctcag  120
cacaccacac acgatcgggt ataaaacaca ttctataaac acgttctgat gcaaactgtg  180
tgtccataaa tatatattta tgcaagticc tcccaccac tgcagggccg tacagctctg  240
gggacaggag gtcacagccg acttttaacc gcagggttaag tagaagggtg cagggtcaa  300

```


agaagtcccc gtgtgattgc atcacccaac ggcactgttc tgtcatcagg aaatgctgag 360
 tgcccgccgt ggccgggtgg ggcgggcg tggtcagacg ctgctctgga gctggctatg 420
 gcaaagaaga ggacgcccag caccttgtac aggagcccca tgatgaagta ttgtanccgg 480
 ntnatgggcn nattntggna cc 502

<210> 9069

<211> 543

<212> DNA

<213> Homo sapiens

<400> 9069

aagaagtgca tattcttta tccaggaatt actcaagaaa tttatacatt ttttaaaaag 60
 atcaccaaat gcatcccaca tagttccttt acaataaaca aaagataaac aacctagcgt 120
 cctgtcctat atgcgctcta ccagatgact caattatatt ccatccatcc atggaatcct 180
 agacaatcat aaaaggacat ttatgttaac atggaaagtg aagatacgt ttgaagaata 240
 ggctacaaga gagaatacat tacacaatcc tactgtctgta taaaacaaaa catctggaag 300
 aatctatgct taaatattaa tagtgtgtcc cgcaaagtgg taggataata gtgactttta 360
 ttctttttac ttatctctat tttctcatgt ttctgtaatg aacatgtttc ataaaacaaa 420
 atgggtctgn tataaaaaatc tgaaaacttg gttttgaaag agagcagtat tacaggctgt 480
 aagtggcaaa taaaatttna tggtaaataat tccgcttccg gggaaataac cccattntta 540
 nta 543

<210> 9070

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9070

ctaatacatg gggttttctt acattgtcct ggccgatctg caactcctgg gctcaagcaa 60

tccttccgaa agtcctggga ctacaggtgt gagccaccac gctcagcctt tttttcctta 120
 ttactgtact agggacattt gtggcttttc cacaatgaga cttagtagag aaatgacagc 180
 ttcccttggc cctatcctga aatacactaa ctagctcttc tctgccaggg ctaccgtttt 240
 ctccctaacc tttgcagatg tatgtatcca tataaatgtt tctatttcaa caaactgtag 300
 aaagtataca gtctgtacag ctccccttat aatgctatta cctgatgatc ctgactacaa 360
 gttggaatta tctgcatact tggcaaaatt caagtgtggc tgcctatgcc tcgagagaaat 420
 gagcagcaaa ccagcccagt cctaaattcg aatagcagct cttaaagaga atanggagct 480
 cttggaangc tttctttang actggatatt caatttctgg gcttancccc ngggttaatt 540
 ctaccaggcc attttgaggg ga 562

<210> 9071

<211> 549

<212> DNA

<213> Homo sapiens

<400> 9071

ggattgtgat gtaatcttta tttcttactc tgagctccag ttagaaaagt ttgacaatca 60
 ttgttataga gctatgttca gaaagtggag actttctgac tcaactgtgag ctctgctgta 120
 tctatgcgct ccctggagag ggagcaactt gctaaggtag agtcctgtcc attggcatgg 180
 atatttattg ttccacatgt tgggaaaacc atgtgcaata aaaatcaaac atatgaaaca 240
 atggctgtca ttgtaccaca gtatacattg tatcttgggtg aaggttctta aattactcct 300
 tggagtttcc taattcactt caggaaggat ttgttgtgtt ccgtctttat gctgtcactt 360
 gcaaacactt ttgctttgct agttcttgta ttagatcttc atatacttgc aaaaagaggt 420
 cctcttcaga ttttgncca tccaggtcac aacttccatg tgatgtcctg catttcttgg 480
 ctgnctttag atcctgggca cacatnggcn ttaaagagatt cccgaaagct tggaggntaa 540
 aaanccttt 549

<210> 9072

<211> 494

<212> DNA

<213> Homo sapiens

<400> 9072

```

cttatggatt ctttattgaa tcacaaacaa ctcagggcat caggccccag cagctgcatt   60
agaacccatc tgggattgtg aggggactgg agagggaggg gggagaagac ccgctctccc  120
tagcttttca ctatatagag taaaaacatc agaaatcacc ccaagagaaa ggacatacca  180
aatgcccacc agaagggccca gggactgcaa gccaccctga gcgcaggagg gtgtggtgaa  240
gggtggtatg gccccgaaat ttgtgtgtgt cccccactcc ccctgcaaat tcacattgga  300
attctcacc ccaaggtgac agtattagga ggtggggcct ttggagctga ttgggtcatg  360
ggggcggtgc cctcatgaac agggttggag tccttataaa agaggcagga agaggatgca  420
ggcgttgacg ttgntgtana aagtcaggcg ccanatgctt nccgtcaccg gcnggagccc  480
tttgnggggg aaan                                                         494

```

<210> 9073

<211> 534

<212> DNA

<213> Homo sapiens

<400> 9073

```

aagctatttt aagtataaac tctattcctg aatatcttca gatactttct gctagttcaa   60
ataaactcac acagacatta atccaatttg aataactaca tatgaatgag gctacagtat  120
tattcaatcc agagtgtgtc acttccgttc atgaaggctt gctatgcata aatataaaaa  180
tattttatct tctgatgctt tcatttttga agcactccct tcaaaggatg taaaaaaata  240
ttaaataaaa gagctttcaa agtgttctgt taggctatga tttgaggggg agatgaatgg  300
aatggatat tgatagttat ttaactggag atctttgtgg tgatatgtga aagtataaac  360
taactccaac aaactcgttt tttcctgaaa cttttggtgt aaaattatat attattatta  420
ttttgagaca gggctcttgct ctgttgccca ggccaggctg gaatgcaatg gcatgacctc  480
ggntcactgg ccctggcctc cgggctcaac gatcttccat tcagnccant ccan          534

```

<210> 9074

<211> 565

<212> DNA

<213> Homo sapiens

<400> 9074

```

atatctatta gtaagattag caaagatact gttgctatTT ttatatttgt ccttttaaaaa 60
ggtagggccct tctccactta cttccatata cctagagaaa tagatatatg tactgttgtc 120
aaaaaaaaatc aaacacacaa atactggaat attaaaagac aggctcctca tttcttctct 180
tcctcatcct ggtacacagt gcccaaaagc tttagaaatg ccattatgaa caatagcttt 240
tgctagtTgt taggaaagca atttatgagt tgggaattat tgtggaagac ttgatggatg 300
attatagctc tgggtcacta acttcttttt atgaaaacat gaataatact agttataact 360
caaagtcaaa atagtgtaaa agctgtggag tgcttttgta gggggtatat taaattgccca 420
gaatattgca gaggcTcatc ttggaacaag aagtagaatg ctggttcagt taagaggact 480
gggctggttc aaggcacaga ctgntcantt cgcatnaca gtggtggctg ggggttttca 540
tcaggcatta ctaatgggna tggga 565

```

<210> 9075

<211> 381

<212> DNA

<213> Homo sapiens

<400> 9075

```

aaatctcatt tctgtttttt tattgtcttt tatgttaaac tttctacaaa aggatgtata 60
aacgggtaag taganaatct ctatctacaa aatgttttct cttttaagta ttacattact 120
tggtgtacat ttaatagact gacatatata agcacataaa aatcatttta cgtaatacgc 180
tgcgaaatac gttgactcct cctccgcctc acccctgaan tgccTcctcc tctatcctcc 240
ccatcacttt catcatcttc tgtctctgct gctgtattat ttttagggnt gcctccnccn 300

```

agcagtgagg tnattgcttt gttccnagca tttgtgctag ctgaaactcc ctttcttctt 360
cttcttcac agggtcctaaa t 381

<210> 9076

<211> 568

<212> DNA

<213> Homo sapiens

<400> 9076

ggtatttgca gaatttagct gagactgtta caagcgggtt atcaaaataa atgcttgatt 60
ggcttttagca gttttttcgt aattgaaaa ataaagaaaa aagagttttc taataaatgg 120
aggagagag aggttaaata ctttaattac taacttgcaa aaagatttcc atttgaatat 180
ggaaacaatg taaaggggtc cctaattttt gtgggactgg aatcactcca gaggatttaa 240
tgatactgct gggcaactga aactgtgcaa ctgaataatg tgatttctaa gcatatttcc 300
ttaaaattta agtgctaggg aacatttaaa atgggttact ttaaaaggaa ggttgaacat 360
gcnaatttgt aggggagagg aattaaaaca gtgatttctt tcaatgatac atttttcatt 420
ttctatttta aaacgaaaac catttacttt tgagtcaaca ggcatgtgac anaaagtgtc 480
acatanaaan aatttcccca ccaaggactg cctggatgtt acttgaaaaa cncaggtta 540
attatttctc cncctttaaa acatactt 568

<210> 9077

<211> 343

<212> DNA

<213> Homo sapiens

<400> 9077

gtgtttcaaa gataatttta ataacttttc ttatgaatca gttcccaata tattagagac 60
caaccatcat gttcttaaaa ctttgtnact tgcagtcnaa tatatggatt cnatatagta 120
caaacatttc cctacatcaa tcaccttcag ttggaaagtg cctctccta aaaaganatc 180

aaaactcacc ttccaggtag tgattactgc gtnagtttca tggaggaaaa aaaaatatatt 240
ataaatgtga aattgcctct aaacaagggg naggtgcatt tccntcnctt gtttaaaaca 300
ataacatgaa gatcaccng tttgtcttc tccngtgaaa agt 343

<210> 9078

<211> 562

<212> DNA

<213> Homo sapiens

<400> 9078

gagagggagt ctcactctgt tgcccaggct gggagtgcag tgggcgcaat ccacctcctg 60
ggtttacgcc attcttctgc ctcagcctcc cgagtagctg ggantacagg cgcctgccac 120
acgcctgggc taatTTTTTg tatttttagt agagacgggg tttcaccatg ttagccagga 180
tggtcctgat ctcctgacct tgtgatctac ccgcctcagc ctcccaaagt gctaggatta 240
caggcgtgag ccaccccgcc cggccatgtt tttcatctta attcttctat tgattaaaat 300
gtgttctgta aactagaata tgatatcgaa gtatgaagtt caagtttctt ctttcagttt 360
cagctgatag caaataatta attataccag aatgaaaagg cagaactgct ccaaatgcac 420
aaaacttanc tagcactaaa anaaatactg aattttcccc catagtatat aatattttat 480
tggaacaaa aatattttaa tgaatttcnc agctatatatt acncataggg tncgcggan 540
aaggaaanat tgattacctg ac 562

<210> 9079

<211> 525

<212> DNA

<213> Homo sapiens

<400> 9079

ctcttctgaa ataggtctc actctgtcac ccaggctgga gtgcaatgga gtgattcacg 60
gtcactaca gcctcgactt cccaggctca aatgatcctc ttgactcagc ctcctgaata 120

gctgagacca caggcacatg ccacgactcc cagctaattt tttttttttt ttttaaatta 180
 gagatgaggt ctcactttcc tgcccaggct ggtctcgaac tcctggcttc aagcaatcct 240
 tctgcctggg ccttccaaat tgttgtaagt acaggagtga gccattgcac ccnnccagga 300
 aaccanatt canaaaggat atctgtctag agaaaaatct cattcagtga atttaatact 360
 tacataaac tatgacttgt aagtccagaa gttttagggt aagaaaacat gtnnccattg 420
 tncccaatgg agaattttaa gctcaatgtt ttttggtggc tccaagatca agccaccatg 480
 tttatcacct tatcatanaa accaaatttc ctgaanantt gcccn 525

<210> 9080

<211> 347

<212> DNA

<213> Homo sapiens

<400> 9080

aanatgttac aaattacttg atgttttaat atgttctttg ttgaatagct tattttacat 60
 ttcagtcaaa atagttatct cacagggtgaa accactaagt agcttacttc ctacctttta 120
 aattaataaa gttacagtca gccacattgc ttgagtcttg ccaaaatctt tagagaaaca 180
 acacaaactc agacatctaa gtcagatcaa attanagccc aatatttttg atacttttat 240
 tgtatatgac tagttttcta naaaactatt ccanaanata cagtcttcct tccanaaaat 300
 acagctttac tgccttaag tgcctaata ttttcnagag gaggagc 347

<210> 9081

<211> 520

<212> DNA

<213> Homo sapiens

<400> 9081

ccatttgctt ggtaaatatt cctccatccc tttattttga gcctatgtgt gtctttgcac 60
 gtgagatggg tctcctgaat acagcacaat gatggatttt gactctatcc aatttgccag 120

tctgtgtctt ttaattgtgg catttagccc gtttgcatth aaggthtaata ttgttatgtg 180
 ttaatctgat cctgtcatta tgatgctagt tggthatttt gcctgttagt tgatgcagtt 240
 tcttcatagt gtcgggtggc tttatagttt gttatgtttt tgcagtggct ggtactggtt 300
 tttcctttat gtgttttagt ctgccttctg gagctcttgt aaggcaggcc tgggtggtgac 360
 aaaatcgctc agcatttgct tgtctctcag gattttattt ctnccttgct aatgaaagct 420
 taattttggc tggaatatga aaattctggg ctgaaaatcc tttccttaan aaagttnaat 480
 attgggcccc cctcnaatc ctggnthtgt tagggthcca 520

<210> 9082

<211> 454

<212> DNA

<213> Homo sapiens

<400> 9082

aagaaaagta aattcatctt gctcacagtc ctttctggaa gagtthtagaa agcaaagaat 60
 tcaccgactc agcaggaagc agaacgagct gttccttctt ttgacacgca caagctaate 120
 ccctanagag tggggatgtg ggaaacggag ggtaattaat tctthagtca ctggttcact 180
 gctgaatagc cttggthcagt tttggctctc tcctatttta gggggaaaaa tattthtgtt 240
 tctthttttt aaaaaataaa atgttcgcac aatggggaga aaattgctth aagtgttaca 300
 ccttagccaa cagagcccaa actccgtgtt tccgttctth ctctthcggt ttctgctgaa 360
 ggctggtgac aactggcct cttgtcagtg gctgccggca ngggccagga aacaaattna 420
 aactgcanca cagctcanc caaaaanccc tggc 454

<210> 9083

<211> 527

<212> DNA

<213> Homo sapiens

<400> 9083

acataaatta acccatttat tataggccag tgatgtctca aagagtagag gagcgtctac 60
 tggcttttca actccttcag tcttctgatg gcggacttta ccgtgacagc ggaagtggta 120
 ctggaaagaa agattcagtt tccaacataa ttaagcatgt taacatagaa aatggcaaata 180
 aagtaaactct gcctcgtttt tgtgttaaag tcgcttccca aattttccta gaaagaatta 240
 tactgagata gactgctcta ccaatacttt gctgcagtca atccaaagat ctaaccaaca 300
 ttagattact cctcggaat tagtggcttc taaactacat gatggcatcc ttttaagaagc 360
 catgccttca ggatcttgca gaattngaca tacaatctca tgcactgat ttctcaaccc 420
 agagttgctt ttttttttat aagttactcc agtttgtgga caagccangc ttttaactccc 480
 ccctaccctt ccattgaaaa aaaaaattgg gtcctaaaaa ggtnгаа 527

<210> 9084

<211> 331

<212> DNA

<213> Homo sapiens

<400> 9084

gacagcagca tctgtttatt gacaattcca ggtcattcct aacacgccgc agcagggctc 60
 tgtacagtcc ggcccgggtg ggaagaagga gggaagcang cacacnaaan accaggtatg 120
 tcgggaagtg cacacaaacc gttgtctttc ctttttggtt aaagaaaaaa aactttgtna 180
 tcaatatccc gtcataant aaaagtggaa aanaagaaac ttgactgctt tcactctggcg 240
 ttttggcatc tcctctccca ttcatatgc acagtttatt tgggtnatgc taccgtcacc 300
 agcanaacac ctgtnagtна aaacnaatgt c 331

<210> 9085

<211> 456

<212> DNA

<213> Homo sapiens

<400> 9085

gagaaaaaaa gcctgtcgcc caggctggag tgcagtggcg tgatctcggc tcactgcgac 60
 ctctccctcc cgggtccaaa cgattcttct gcctcagcct cccgagtaac tgggaccata 120
 ngcacgtgcc actatgccc gctaactttt gtgttttgag taaagacagg gtttcacat 180
 gttggccagg atggtctcga tctcctgacc ttgtgatgta actagtattt cttatgccct 240
 tattttgtgc taggcacagg gcctcaccca ttattggcac tcggttaagga ttcttgggat 300
 taatganaag ttaacctaaa tcttcaccaa aggccctga ncttcccctc gattcacata 360
 caanggactg gggctctgaa aagtgggctg tgatgcgccc ctggaaaacc cacnaatggg 420
 cctgcanaac tgattgggaa ggttcatgca nggnca 456

<210> 9086

<211> 304

<212> DNA

<213> Homo sapiens

<400> 9086

gagggccaca gggaaaacaa ngtttgtcct tcagcaggga aaggangtgc ctcatccgtc 60
 atggtggact cattgaaata agtctcctcc aggggaggtt catctcaggt ctaccctgga 120
 ncagggaaca gtgtctctga agtgggtctg gcttcacagc tgattgcggt tccgcttagg 180
 gatgatcttc cggtaggttc tgcgctctga aatgttgcgc ttcaccttgg ccgtgggtggg 240
 ancctcatcc tgggtgcangg acgggctcga ntgggacttc ttcangctga ncttgggctc 300
 ccga 304

<210> 9087

<211> 440

<212> DNA

<213> Homo sapiens

<400> 9087

aacaaatgan ctgactgtta taaagtaaac atcaaggaat gtaaaagcca atgctccact 60

ctctcagcta cacatggagt cagtgcgcc tgcaaagaac agagcangcg ctggcagact 120
gaccttcaca gaccatgcta aaaccctctg aggaagtgcc tggatgaatgc tctggttgat 180
gagattcgag ccattatggt accgancagt gtgcttctta cctataattc cactgtcctt 240
gctttccagg gtggaactag ggctgcta at ggtctcacag ggacttttgt tggctgccgt 300
cttgctgaca canctattca aggttgaaca ggggctatcg gtgctaggan atgcgggtgct 360
gcttggttagt gtggagcaag gactgatgcc ttgactcana nctgtgcaca tggtttcatt 420
tittgtcttcn atggttatnt 440

<210> 9088

<211> 452

<212> DNA

<213> Homo sapiens

<400> 9088

gtttctcttt tgcactgita ttttattttg tttagtccat atattatata aaacataaca 60
ggaaaaatga acgaatttat aaaataaatt gaggtgtttg gatgaaaaaa aatacaanan 120
ctttgccttc atgtctacag atctctta atattgttgg tcttgcacct tagatatcaa 180
ataaagatat ctagcttgac acaaaaattg gtagctgcaa ggtaagctg tattagtttg 240
atgatgggcc aggaaatgat atattttcta aattttgtcc ttaaataattg gctgtaacaa 300
atgctgatat agcaaaaagt nagcttctat tagacagcaa ganggaaact tgagtgaatg 360
aatgcaactt acctccaagt cctcttaaag gaagtaaaaa aataaatact gtgttttacc 420
agtgtcccccc nccaancatt attctnagen tn 452

<210> 9089

<211> 540

<212> DNA

<213> Homo sapiens

<400> 9089

ctaatttaat tctttatcat tcaagtagag agacaggcat tttccaaagc aaacccaacc 60
ctcgtgatta tttctagcca gggatgaagct aaggaaagta gcagtaggtg gtaggatcag 120
caccttggtt ccaggcatca cgccagtcac tttatttcca tcatcatcct tgtgaaaaaa 180
tggaagtctg ganaggtgaa atgatgaagg caatctggcc acaaattctt cttctggatc 240
ctgctcttca gggcatgcat ctcccatgct gaaggttaaa atgggggtca tttgccaaca 300
aatttggtan tccgcttctc cctgaagctg ccatgccctc tanccgggtcc cgggttgtaa 360
tattctgggc atancacatc ccttcaatgg ccatccana tgcaatgtcc acctccgttc 420
ctcggttaat gggctacttt gcccaccgc acngcaattg ggggctgggg caagatctcc 480
tgggccaatg ctctncccc ctnggtaggc ggggtcccc ccccttctng ggcccaacgt 540

<210> 9090

<211> 588

<212> DNA

<213> Homo sapiens

<400> 9090

caaaagtgga agcttggtta atatcgctct accatcatcc tgaaaggcat aataatttga 60
gttacacatc tgaactgatt ggagttacag aatcatatct cctttttgca tttacaata 120
tatacaatat aaaataaata catttacaca aatggacatt tgctggagca cacagtatgg 180
tacacatcac aaaaatatac aattgattgc tttacagatg tgaagcccat ctacagctat 240
agacatgggt ttattattat tattattatt tttactactg gctataatgc aactcctgga 300
ttattataag cagtttaaatt ttttgtcct tttacgatct ttgcacataa gactgccata 360
aaatgttttc ctaggcaggt aaacaganac gcttaataaa ttaaaatata atcaccaaca 420
cccattttct ctcttataaa aaaaatanca gttttaaatt ttttatatct tttatgttan 480
catttaaag caaaatatgg gaataaatac aacaatctgg tttgattgaa acccatntt 540
ctcncaggaa tccccatcc tttggttta attaaaacaa acccaaaa 588

<210> 9091

<211> 469

<212> DNA

<213> Homo sapiens

<400> 9091

```

ggggagtgga taaagtgcac ttattttctt ctatgtttgt ttttgtaaaa aggagaaagg   60
aagcaaaaaga ctccttcctt tcagaccagc tgtccactga gcttggaggg ggtgganccg  120
ggaccacccc ctaggaaaag gtgtangaat agaagcaatg gcattggcgc tatantccat  180
ggggangaag tgcctgatgt gcctggcccc taggctggcc ccaccagag cggaggagtg   240
cctcagcttc atcagggtga aactgganaa aaantttctga gcctggatct ctctgccctg  300
ggtcagcacc aaaagaaaac cttccttcag cagctcccag ctcttcaca cagaaccac   360
gcacaggatg gggagtccaa tcttgccctg gaacaagacc ggtcaatct cgggcaacac   420
tgctacnatg tntctgccc ncatctccc ancctcctga aaatatanc   469

```

<210> 9092

<211> 555

<212> DNA

<213> Homo sapiens

<400> 9092

```

aaatatacaa cttgctttta ttaaattgaa aaaaaaatcc ccaagangca gatatcccag   60
tagtttttagt gaaaacaaat ttaatatcat cttgtttgaa caaagcttc agaataagt   120
agcaattaaa ttcttaaagt agggacagaa caccaacagg ctctagactc cggaanagct  180
gtaagccgac aaatgggcat tgttttgctt aacagtttta gcttcaatgt aaatatatat  240
tattacttag aatattagca tctgaactat ataatgacta ttttatcatt ttacttgaat  300
taaaaccaga atttctggaa ctccaaata gtctttaag ttttcaata taaacataaa   360
ctaacccta ttcctctcta catatcaaat gtgaaataac tgcacaata tatcagcatt  420
ttcacagaaa gatgtttaag gcttctggca cataaatgt gtaatttccg tgtgacaagt  480
cntaattatn taccgaaaat attttaaatt attggtaaaa ttaattcnta agaattanaa  540
aaccagaatt ncccg   555

```

<210> 9093

<211> 610

<212> DNA

<213> Homo sapiens

<400> 9093

```

aatcttttat tttttattgc atacatcaat atttaacaga agaaaaataa agaaccacct 60
atgttaaact gaattacatg ttatctctcg attcttttca atgtagacct aaattttcac 120
atgtatcagt aaacacaatt tatgttctta ttaacatttt tgaatctcac ttttttgcac 180
acaatttgac atatatcaat attattgaat ggctatataa cattctgtga tagcactagc 240
aatacaccaa aatttactta accatttcca atcgttgggc tttttcccc cttaaagtta 300
tctgagtggg actgctanaa aactttgtac aaatagcttt tctttctttt aaatattttc 360
ctgggcatat gccactcaaa gtgagtatgt caaaagatca gttataaagc cctttttata 420
gtcttctaca cagttctctt aaaaggntac taatacacia tgctgctgct ataaggacca 480
tgcnattaaa acagtttggc taatacaata catgaactaa ttcaanttgg ctttttaatn 540
ttaggaaatt tgaatacctn ccaatgaatt ttaaaccctt naccctaaac ctttaaantt 600
gccaaaaata 610

```

<210> 9094

<211> 437

<212> DNA

<213> Homo sapiens

<400> 9094

```

agtagacagg gggtttcacc gtgtagcca ggatggtgtt gatctcctga cctcgtgatc 60
cgcccgctc agcctcccaa agtgctggga ttacaggcat ganccactgc gcccggcctg 120
cttcctgcca agttaaacgg catgctaagc tctcagctcc ccatgcccaa gtggacttga 180
aaggcttacc ccagccctcc ttccacagcc catcctgagc aggctgccta ctccaggcag 240

```

gccccaggct gggctggacc atttaatcct cncagccctg gtaaggctga natcacggat 300
 cccacttcat aantggaaaa aactgaaagg ctcagggggg gctgaaatct ctactctaag 360
 gtttctttct ctcaaaattt ggtcgggaag ggggtctnct tntctctggg gcacttttct 420
 tatcccnccc nangggc 437

<210> 9095

<211> 320

<212> DNA

<213> Homo sapiens

<400> 9095

ggaaagcatt ttcaaacttt atttacaact gtcacagtga caaaaagtag tttggaaaaa 60
 aaaaaatgct agttttctccc tgagcctcaa aaaanaacag atagaagtta caggaggttc 120
 atctcacaac aggcattttt actgaaatac taggaatttt ttcaatacaa tcagttagaa 180
 atacacacaa attacttgaa aaaaaaaaaa gaggaggcca gataggagct caccncttg 240
 tccaanaaca nctgggtccc ccngcaggc tccaccgctg agggtcctga cattatctgt 300
 cagcccctgg cctgctcana 320

<210> 9096

<211> 526

<212> DNA

<213> Homo sapiens

<400> 9096

gagatggagt ctcactctgt acccangctg gagtgcattg gcgcgatctc ggctcactgc 60
 aacaacctcc gcctcccggg tgcaaacgan tctcctgtct ctgcctcccg agtagctggg 120
 actacaggcg cgtgccacca tgcttggtta attatttgta tttttagtaa anatgaggtt 180
 tcatcgtgtt agccaggatg atctcagtc cctgacctcg tgatccaccg tctcggcctc 240
 ccaaagtgct gggattacag gcgtgagcca ccgcgccag cctaactatg aggtgattta 300

aggaaagtaa tgggaagggtg cacttaaagt ccctgtgatt ccctcttttc tttatgttaa 360
 tctggaaact tgtagaaaag ccttctcttg ataacaaatt ttatgtnact agctcaaaca 420
 gtgatttgcc agattttactt aatcnaggaa tataatttng anggaacctt ccanaaaatt 480
 ttgggttaat ttggccttcc ttatcctaaa atttaaattc cccctn 526

<210> 9097

<211> 611

<212> DNA

<213> Homo sapiens

<400> 9097

gaaatttcca aattgcttct ttttcaactt tttattttga aaaatttcaa acccacagaa 60
 aagtttcaag aattgtgcaa tgaacacccc atatagcctt cacttagatt catctcatca 120
 attaatgttt catcaaatat gttctctctc tctctctctc tctgtctctc tccatgtgtg 180
 taccctactg aaaatctttt tgcagaacta tttgggagtt ttagacagct ttgcccccta 240
 taggctcaaa ctaatttcag ctcaagaaca gaacattaac ttacataacc aatatatatt 300
 aaattcatga aatttaacat tgatgtccca ataataccag ttatttttca gtcacttttt 360
 tacagtcatg tttcctacta atctaaaatc caatccaaga tcacacactg catttagttt 420
 ccaagtctcc tgagtttgaa atagttcctc agcctctctt tgactttaat gaatatattt 480
 gaagantaca gaacacttat gaatggaatg tgttgaattt ggggtggctg aatggttctc 540
 ncgatcagat cagtttatgc agttttgggg agaaagcttc nnaaatnata tgtgtgttct 600
 cctggctncc c 611

<210> 9098

<211> 606

<212> DNA

<213> Homo sapiens

<400> 9098

gaccatttcc cacaatcttt tattaagaaa aattccaaac atacagaaaa gttgaaagaa 60
 caagtacact gttcactgaa ataccagcca ctgcagattc aacaatgaac attttggcct 120
 tatttgcttt gtgtattttg gggggaacta tttggaatta aattacacat ttcttgaagg 180
 cattcaccta tataatccag catctatctc ctaagaatga ggacattttc ccatgaactg 240
 cagtaccgtt aaatggctat tanaggaatg gttggtcttt gtgagggtct cacgtccagg 300
 aacctcatca aagtgtgcta ggcccttanc agagagggtta gaacctgctc gccggctccc 360
 tcaccttctc tcccatccca naaaggcaga aacangagggt gctgtgaata gaacagtgcc 420
 ctttgtggtg acaaagctat ggggancctg ctgtgcatgt gccaaagacct gcagggcagc 480
 tccccacccc ccacagggaa ctctgaactg catggttttg tccncttctn cttttaaata 540
 tctgaanttc aaataaatct tccccaaat cntctccnat tagaaacctg aatgccatct 600
 aaaacc 606

<210> 9099

<211> 597

<212> DNA

<213> Homo sapiens

<400> 9099

aattgtttca ggaaaagttt atatattcag cactacagat aagttttttt ttaaaggana 60
 acctttttcg ctgttataaa caacttcatt tatagcataa taaacatact ttcagtcaat 120
 ttctttacaa tctaaagacc cctgaactaa attttatgtt gtgtcttaag tatttcaaaa 180
 cccatccatg tcaaactgat aattttacta ttgcttgata ctatgttatt tcccttatgg 240
 gtaaaacttc gatcagtggc caaatctgaa aagcaagaan acactcttgt catctgaaca 300
 gttctattag gatgttggtta gctttttgaa aatattatat actaactctt aaattatatt 360
 taaatgccag ctacccaatg gtgccagaaa nattattgca attgttttta cccaagtata 420
 atttttaaaa taaaatcatg ttgcattgca tttttctaaa atcattagat ttataattga 480
 ataagggtta acttacaatt ttttttaggg ccccaaaaaa aaaaaaaaac ttttttgaat 540
 nccccctatt tntttctccc naaaaggtag ggtatttttt tgtttaacaa ccnctn 597

<210> 9100

<211> 399

<212> DNA

<213> Homo sapiens

<400> 9100

```
attcaaaaca cttagtaaag gaaaaggaca caaggaaatt ctgattaaag tcttctcctg   60
ctctgtttgc aattatacat gccttcaaag tcatttgaaa gtaagaccat ttcctttggc  120
aggtatcttg tataaagtaa ctttacaaca tatgtttctt gaacagaaac ttacaccac   180
tgtcattatg ttacctatag anacaaaact actaacacaa gtaatatggg cttacaatta  240
taacacaaac ctgtgagagg gcatgataaa attaaatttt gattgccttc ttttattatt  300
atcactacta ctgtctgctc acaaattctg tggccanant ccatttcaa tccttctaag  360
antccacttc atganttaaa catatacata tanaacaaa                               399
```

<210> 9101

<211> 477

<212> DNA

<213> Homo sapiens

<400> 9101

```
aaacatatga tcattttaat tacagatgat tgaaatacag tgcaacagat gagacagata   60
caatactgta ccagttttta aaaacctgaa ccanaacggn ttcgcattct agtacactta  120
cttacttaaa acaaaaattg cttagataac aaaactatac ttcaagttgt tttanaaaca  180
gttctgcgct aggaacatac aaaggaaaat gaccggttgt gcttctttaa aatcgaatga  240
nagtctcttc tagggctctg ctgacaganc cccccagcc tccgccaggt gaggtgcaca  300
gggcccactc caggcaccag ctcccccaa cttggcttct ctggtttgtc gaaagcatca  360
tccantccac actatgttta acagtcctan tcaccacggg gantaaattt ttctgaaggt  420
ctcatccgtg gaatccnacc gtacataata antttacccc caatcccnat tgaatcc     477
```

<210> 9102

<211> 366

<212> DNA

<213> Homo sapiens

<400> 9102

```
ctcttcgtaa aggattcaaa gcaggcacag tgggtgtacac ttaaagtccc agctactang 60
gaagctgagg cangaggatt gcttgagccc aggagttcaa ggccagcctg agcaacatag 120
tgagactcca tctctaaaaa aaaataaaaa taaaaataaa taaaaatac aactaatgga 180
aagggaaga aaaaaaaaaa aaaaaaatta aaagtgttc ggagcagtat tcctgcaaga 240
agctcccggc gcatgtatat ttacagaaaa tatgtacatg cagcaggccc anaggccacc 300
anaaggcaga gggcttctgt aacaattcaa gcctctgggc ttgaaccag ggaatgggtg 360
gcttcn 366
```

<210> 9103

<211> 440

<212> DNA

<213> Homo sapiens

<400> 9103

```
gtgggtaaca tcttgattta atttacaat aaaaagccaa aaccctcaat gcaaaggaaa 60
actgcagttt acacttattc tgganatcat ttttaaccac agaaaatgtg cccctgtagc 120
atgtttttta atggcaagtg ctatgattgc ccanacatcc ataaactgct tgtatggagt 180
aagaaattca taaatgaana aanatttggt ttctgtcttg tttctcctag gtcacgaaca 240
ggatatttcc cacaaaatgt ttgacctga aaggaagtat gattccagta cttctgggtc 300
taactcttct gaaattacac tgcaagctga aacttcnggt tacttcagcc acattttctt 360
ttatcaccca ttttcatgt ttttttggt taaaaccnc ctgctgtccc ccnttcccc 420
ccgttcncng tgttcganta 440
```

<210> 9104

<211> 482

<212> DNA

<213> Homo sapiens

<400> 9104

```

gggcaaatag ctaattttat ttttttcaca tattaaaacc cactaaaaat aaccattttt 60
ctaactaacc acaataaaaa ttagtganaa aagtactgct gctttacatt tctccaaatc 120
tcttcaatgt ctgatgacag acnaaagctg gaatcttgta tctgcttttg cattcagcct 180
attacaatat cacaccanat agcctcttga aaactcctct gcatactcat gaaaaaatga 240
gtgaaaaana taaatgatgg ctgggcgttg tggctcatac ctgtaatccc agcacttttg 300
gaggctgana tgggcagatc acttgagctc aggagttcca gaccagcctg gccaacatgg 360
tgaaaccccg tctccactaa aaatacaaaa attaccangt gtggtggtgg gtgcctataa 420
tcccanctac tcngggaanc tgaagtagaa aaatgcttga acccagttgg gggaagntgc 480
at 482

```

<210> 9105

<211> 530

<212> DNA

<213> Homo sapiens

<400> 9105

```

aataaagaca aagtcttgct atgttgccca agcttgtctc aaactcctgg tctcaagcaa 60
tccttctgcc ctggccctcc caaagtcttg ggtattacag gtgtgagcca gcactcctgg 120
cccatcacag tcttaaaacc aaaagtcttg tgtccgagga aaaccangag tgatttggtca 180
ctctatttat gactcatagc acttacaggc tacttcggca gggacttggg gtaccctgt 240
tcttggtatg cacatcatta tcagcaacag gaacagttct ctganccctg gcccctggag 300
aatctctagc ttagctatct tagacttggg gtcaaaaaaa aaaaacctct tgcccaactc 360
agcaacacca gacaggggcc tcatatcttg gctcgtggaa agtactttta taccaanccc 420

```

tctcctaagg gcataagaac caacattccc attctgggga aanaaaaagc agtnccccctt 480
ggaccaagt actgggtcct gccgggaatc ccccccccc aggggcnngn 530

<210> 9106

<211> 511

<212> DNA

<213> Homo sapiens

<400> 9106

gagacggagt ctgccatgt cacctaagct gaagtgtgt ggcacaatct anggtcactg 60
caaccttcac ctcttaggtt caagcgattc ttctgccttc ccctcccaag taggtgggac 120
tacagccact acgcctggct aatttttttt gttttttag ttttagtaaa nacagggttt 180
caccatgttg gccaggctgg tctcgaattc ttgagctcaa ctgatctgcc tgcctcagcc 240
ttccaaagtg ctgggattat aggcataaag ccactgcgcc tggctaanat aatttctttt 300
tatattagtt gagggtcata aaacaaagtg aatgcttatt aaagangtag aaaaaataaa 360
gtcattaatg cacacagagg ctgaagattg tgattttata naaatgtaag tcataatang 420
aatgattatt actaacttcc tangtatacc aacataccag tgcttacaga tttcttacta 480
antcntgcct gttgtttttac cnccgttacc c 511

<210> 9107

<211> 535

<212> DNA

<213> Homo sapiens

<400> 9107

gagttggagt ttgcctcttg ttgcccaggc tggantgcaa tggcgcaatc ttggcttact 60
gcaacctcca cctcccaggt tcaagtgatt ctctgcctc agcctccgga gtagctggga 120
ttacagacat gcaccaccac gccagctaa ttactgtatt ttttagtaaa nacagggttt 180
caccatgttg gccaggcggg ttttgaactc ccgatctcag gtgatccgcc caccttggcc 240

tcccaaagtg ctgggattac aggcatgagc caccgcaccc ggcctatfff ttcttaatta 300
 catatgtaaa catatgtgtt ttctaaatac atatagtatg tatgtatgct gtatctgtat 360
 ttctatctac acgtatactc aatttggtat tcggaaactc tatctacatt ttgatcagtt 420
 ctatgttatt aaataattgg ctgctgtccc taaacaaaaa tataaggtaa aaaaccgaaa 480
 aaaaaatntt taactnccgn aaaaaacaac ttttttaatt ttgacnctn ccaat 535

<210> 9108

<211> 543

<212> DNA

<213> Homo sapiens

<400> 9108

atttatccag tctttattat tgaaacactg catttccaaa ccacaacctt atttatccag 60
 tctttattat tgaaacactg catttccaaa ccacaacctt atttatccag tctttattat 120
 tgaaacactg catttccaaa ccacagtggg ttctactaac aaagtgtcta cacttcattt 180
 ctccattaat tacaacatt tcagggtaat tacacttaac actttatfff gtatcagctg 240
 accctcacca caatgcaggg aggtaggcca tcatgccctc tatttgffff cccctaaag 300
 gagaaagtg anaaacaagt ttttgcaat tatacaaata ttgggtgaaa ttcagaccaa 360
 atctgagagg actactgatg agttctttc actatagaca ttcattctat ccaagaaatg 420
 gggaaaaaag gagaatggaa gatttcttc ctgctttaat tggacaattg aaatacnaga 480
 atgntgaccc aaaataccn caaaattgtt tgaaaaattt aaaatttctt tttttncccc 540
 cgn 543

<210> 9109

<211> 434

<212> DNA

<213> Homo sapiens

<400> 9109

gagaactgtt aattgattac tttatttcat ataaaagtta cattgaaana anangttgaa 60
aagtcaagta tacttgattt gcacacactt gccaaagtctc acaggattca accacttgga 120
taattgtttt attgataaca ggatatacat attaaaagcc tcacactgaa gcccacacgc 180
atgtccaacc cagacaacaa tgtgcaaagtg aatatgcana acaatctcgg aaactggcgt 240
ctccagnatc acccacactt tgtccctctg gctgtgacgc agctcttccc ccaacggcgc 300
acacgcttct gcggtgacca agtccacttc caaaccctt gcaggtttgc tcgcttggct 360
aggacggtgg ctgangtang tccctttgtg gttttgcac ancagtggta aaaccctgat 420
tcngatgggg tnca 434

<210> 9110

<211> 546

<212> DNA

<213> Homo sapiens

<400> 9110

acattattgc acagagattt ctcatcaatg ttcttcagtt tttatgtctt ttcctaaatg 60
tgaataagtg ctatggataa aatacaaatg tagaaaataa cagcagcatg atttgtcaaa 120
gttaatccct ataatttagt aagaaaaaat ggatataaac aaaataagtg ctctttctaa 180
actgtactaa attttcaaaa atattgtttt aatgcagtga aggtcctgaa aagcctattg 240
aaagcgatgc tgagtcctgt tttcaaaagt gtcctgtttg ggttttcttg gtgaananca 300
gaatttcaag tgaagtaatc gacggactaa tttaaaacaa aacagccctc ggcttccta 360
ttggcctgtg agggcaccgg ctccgggacc ctgacctggg aggcancgaa tgggtgggggt 420
gcctggcccc catctacacg tacacaggct ggcagccttc catctgatcc accanacag 480
aactttctaa tcttaactcc cnaccgtna aactctgccc ctnaaagntt ttggctccaa 540
agggggt 546

<210> 9111

<211> 435

<212> DNA

<213> Homo sapiens

<400> 9111

```
ctgagagcag aggcttttatt tacaatgaca ttcaaacagg atttagcaaa ggatgcctct 60
tcctgctcgc atcttancag catgggttgt acttcataaa cagaaaagag aaatatacctg 120
ggagcaggaa gtgaactctt ttctcagata atgttctcta aatcccaaca cgttccatgc 180
tcccggctct tancaggtag ttggtggaca cttggttata gcagctgggt gccanatgcc 240
tgcattctac tgaggaatgt gttcaggga aatgtcnaca ctggccggga aaagcatcag 300
gctttcacct cactcatggc ctccataagg cgaacgctgt ttgttgactg ctgtcgtcca 360
ggaaaatnaa cctgttttct ttctctctgc ccaggaaacc ggnaggntga natctcnaaa 420
attcacccc cccca 435
```

<210> 9112

<211> 552

<212> DNA

<213> Homo sapiens

<400> 9112

```
gaaccttttt ttttcaggta taaacattca ttcaatccaa taaagacatt ttagaaaaaa 60
gtcaacctat acaatttatt ttatttttcc tataccttgg ctaaacaaaa tatatttggt 120
gatactgtaa aatactaagc attttcagta aaactggcaa tcaaatacag cttaaccttc 180
ttctgcgtga caactgagga ttttaattgg aaaagtatta tagtctataa acaggaatac 240
ccaaaacata tttaaaccac tcgagcactt tgatttttcc atgttcttg catctagatt 300
gaaacacatc acaggaaatt tcaaagacca acggctgaat atttttcatt tcaacatttc 360
cagtggcatc ctacaagaga actagcactc acaatgaagt catctgaatt ttctttaaat 420
cgtaactcat ttttaatttc taaacagggt tggcctattg atttaaataa nanaattatt 480
atttcataa aatgaattta ggtccnttga aatttccgtt tgaaatctta tccaatacct 540
tanttcccgn ca 552
```


<210> 9113

<211> 320

<212> DNA

<213> Homo sapiens

<400> 9113

```

gctgttagtg tttatttgaa gtgactttga aggactgata atattatggg gcaggcagac   60
tctcactatc ttaaggtggt tcgcctgagc cttcttaaag tggtagccca ggccggggcgc   120
gggtggctcac gcctgtaatc ccancacttt gggaagccaa ggcaggtgga tcacctgagg   180
tcaggaattc nanaccagcc tggccaacct ggtgaaaccc tgtctctact aaaaatacaa   240
caacaattan cggggcgtgg tggtaggcgt ctgcaattcc agctactcgg gangctaaan   300
canganaatc acttgaaccc                                     320
    
```

<210> 9114

<211> 392

<212> DNA

<213> Homo sapiens

<400> 9114

```

gtcagacaaa aatttaactt tttatganat ttcagttttt gaaatacaca actcttacag   60
cacaaacaca gtatttacat ttcaagttct ttgtacaaaa natgtatgcc attttggaan   120
aatattgttg anacatgat ctaaaatacc tgtcanantt actcatggaa tctgctcttc   180
acaaatccat tgtattatga cataaaatat ggctagacgc caaggtttta ccatacataa   240
aaatactaata tctcggctgg gtgcactggc ttatgcctgt aatctcagca ctttgggang   300
caaangcagg tggatcacct gaggtcagga gttcaanana agcctgacca atatggtgga   360
aacccccgtc tctactaaaa atacnaaaat ta                                     392
    
```

<210> 9115

<211> 302

<212> DNA

<213> Homo sapiens

<400> 9115

```
ctacaaataa agtgttttat ttacaggagt tgtctctcca ggtcccagct ccctgccacc 60
cccaccccag ccccaggag aagaaggcgg atgccagagg agctggcaga ggctgggcag 120
gtcctgagt ggccaggcta ggccaagaga gaaggcacga ggccctgggc gccccantcc 180
cagggcagaa gccaggcctg cctggagaag gcagcacggg gtcagctctc aggggtcagg 240
ctgggttcca cgccgccgca gctctgctca taanacagt gggcctctgc gggaanaaan 300
ca 302
```

<210> 9116

<211> 491

<212> DNA

<213> Homo sapiens

<400> 9116

```
aggaaaaatg aaactttatt actacaaaca tgagagctgc atacattcta aatcaaattg 60
ttgcaactta taataccaag aattaaatgt gaatcctact taagaatatg ctgagctggc 120
cangtgtggt ggctcacgcc tgtaatccta gcactttcag gctgaggcag atggatcgcc 180
tgaggtcagg agtttgagac cagtgtggcc aacgtggtga aaccccatct ctactaaaaa 240
tacaaaaatt agctgggtat ggtggtacac gcctgtaatc ccagctactt gggaggctga 300
agcagganca ttgcttgaac ccgggangcg gangttgcan tgagcccaa tgcgccacc 360
gcactacagc ctgggtgaca agggcgaaac tctgtctcat ctaaaaaaaa aatatgctga 420
tccngtcntt ttgaattaaa ctctccctgt gatatactgt tctctatncc atttcaaaaa 480
tnangctggg c 491
```

<210> 9117

<211> 546

<212> DNA

<213> Homo sapiens

<400> 9117

```

cagggtcttc tgtagctttt gtatctcatt ttgaagttgg gtactttcac cttggcatct 60
ctccttttagt actcgggcct gttcctgaag ttacttagtg agggctcttct cttgctcttc 120
cagcaactgg gccctctccc tctccatctt ctcagtcaat tgtttcacat gttcttgata 180
actcttctct tttctttcca tcctctgctg atactttatt tgcatttctt ccaccatttt 240
tgttgaagcc tgtgcanatt cagcttttac acattccact tcaatctctt tttccttttc 300
tgtgagaatc tgggtctgtct gtaaaattgc atcggtcaca gactccttgg atttcaagta 360
tgtctgcaga atctcttcag cctgtatccc ctcccttggg tcctcataat actttttctc 420
cagtcttgta ctctctgaat aaaaaaaaaa aaaccccccg gttccaaaa aattcccgnc 480
ctccattcct cctcctnaag aatgaaaatt gaactgaaat taanctnaac aacaattgaa 540
aaanct 546

```

<210> 9118

<211> 508

<212> DNA

<213> Homo sapiens

<400> 9118

```

cctgcaaagt acctttaatg tgtttaaatc agcagcaagc attangacat gctattttgg 60
ccccataagt taggtgtgta gcactacaca ttagacacca agtcatccca accaatatit 120
atccatatga acagataaac tgaacaaaaa catagtcttg ataaaacctg cattcacaac 180
ctaattgtagt ttaaagtaaa ttttttcaca attgagggtc gctatttagg actgttttgt 240
taataataaa aacaggaatt atatanaaga taaaacacca ttttttactg ctatataatg 300
tcttgctata taaaacatac cctcaacaag tcaaaatatt taaaaccagt gtttcaaata 360
ccaaaaatca cagctatggt actgttcagt aactccactc aaataaatgt tagtactgca 420
ttcttgaaag gaaaaaaact gcanccaagg caagaactct naattttgcn ccccaatttt 480

```

aaaaaaaaa anccccctcc tgcaactg

508

<210> 9119

<211> 445

<212> DNA

<213> Homo sapiens

<400> 9119

gagacggagt ctcgctctgt cgcccaggct ggagtgcagt ggcgtgatct cggctcactg 60
 caagctctgc ctcccgggct catgccattc tctgcctca gcctcccaag tagctgggac 120
 tataggttcc cgccaccacg cccggctaata ttttttgtat tgtagtana gacgggggtt 180
 caccatgttg gtcaggatgg tctcgatctc ctgactttgt gatctgcca cctcagcctc 240
 ccaaagtgtt gggattacag gcgtgagcca ccgcgccag ctgcacactg tatcattttc 300
 atttctctcc cttgctgtcc cctctgcctc tgtccttgcc tccatcata tggacacact 360
 gtgcctgaca cacacgtca cataatctct ccttttttgt ttccctagct actcatcaac 420
 ctcangtttt gcgggannaa aactt 445

<210> 9120

<211> 263

<212> DNA

<213> Homo sapiens

<400> 9120

gtacgaaact gagattttta ctgacatgca gatgtgcttt agagttaatg tttctacaaa 60
 aagtttctat aaacaataga aaatttctag catgaagtca caggatgtta aaaatattac 120
 aatgcaataa atacaactac atcctccaca gcccacacca gacaggaata ggcagctatc 180
 aggtttggag ggaaacactc ttgagatcgc cttcacgac cacagaaacc cagancacca 240
 cncaggaaga nggaacnacc cna 263

<210> 9121

<211> 341

<212> DNA

<213> Homo sapiens

<400> 9121

```

gggagtactt tcacgtttta tacgcaaggg cataaaatag aatgttagga aacaatttgg 60
atttttttcc ctaaaatata ggtgactatg ggctagttta caactttcct tctctcactg 120
aaataaaaaat acatagttaa ggaataggga cgaatacata acaggtgaca ttgacagtt 180
tgggcatatt ccttgttact ttctaattctt ganaatcaca gtttgctggt ttagaggtat 240
ctganangtt ccanataaaa ggcgatggct aaatgctctt aaactttgaa ccgtgctgga 300
tgctcttaag ttaggaaaan gaaatttata accnaaacct t 341

```

<210> 9122

<211> 503

<212> DNA

<213> Homo sapiens

<400> 9122

```

ggtaataaga ttttaatttc cagtagcctg catgaattgt tcccacataa aactgtacag 60
ttagtgactg aattgtatac ttaagtccca gtattttaca ttagtgagac tgaaattaga 120
ggtaaatttc ttttaacaagt gtaaggctta cctatttata aagaattatt ctgttagtgt 180
ttaagaaaaa cagatctaga gacaatccag taggctgcat tgtaaacatt atgattataa 240
atctcttagt actgccatta ttattgacag ttttgtaaan acttgtaaaa agtccagttt 300
ctcaggaata tgaaaattat cttcagaaac ctggttgggg cctttctcca attcctccag 360
ccagctgaaa tactgccaag ctcaattcat gttgcaaggt gatctgcaact ttcttgtgag 420
tcgcttctgc atatactcgg acaanatctt ctgttncaga agggcggaca aaactcnaa 480
aaanctgttc ttctccccag ttc 503

```

<210> 9123

<211> 553

<212> DNA

<213> Homo sapiens

<400> 9123

```

ggcatgagag atgcaacagg ctttattgtt gcagcaacac taacatatac gccccattcc 60
ctgctgancg ctgtccccac ctcacccctt ggttgtcgat ggtgtggaac attgggggtga 120
ggggtaaaat gcctaagcan aactggaggg angcaaatgg gactgggtgag ggtcgggatac 180
acctgaacca ggggtccaac agtcaggata cccgactcca tccacacagg ggcatggaac 240
acttgggttc tganttcaaa atttggcaat gtcttgacct gggttggaac gtaggtgggg 300
tctggaaaan ctttgggtcca ggggtcaaaa ttgaaaatg ccttgtctca agccccagtt 360
tggggatgaa catggaaaaa ggtggatggg antgtctctg ggttcacaat ttgaaattgg 420
ccatggatgc tctggcctga accccatttt ggggctggat gtaggtgctc ttggtccnaa 480
gttccaagct ggggaaaanc ctttcccaag ttattggggc tggnttttaa ganatcctaa 540
ttttgggcct gnc 553

```

<210> 9124

<211> 544

<212> DNA

<213> Homo sapiens

<400> 9124

```

cgttntttt ttttttaaac aattgattta aatccatgtc attttacttt atatgtactg 60
gtctctcatc tgactttang cgttttctgc ggggntgtat aaagtctcat cagaatcctc 120
agttacctcc accatcatcc tcttcctgct caaactctgg caaaggtgcg aanggtcccg 180
tctgaataaa tctctgtgan tttatcttcn aaagtacaat gcaactgctt tccctgcctg 240
agctacttct gaatcagcct tcaaattaat ctcttgtgtg tctgcataaa cttgaacaac 300
tttcatcatt tcattaaacc tttcacagtt cttgaanatc aaacggacat cggccacaaa 360

```

ntcatccggg atttggtaat gttgggaatg ttttttctga ancttctttt tcncggggga 420
naaatccatt gggttcttta taattttata ataatttggg atcnaacaag aaaaggcccc 480
ggaaatccat acttanticct ggcaataaaa ggtaaaccaa aaaaattcnn ctttccttn 540
ggcc 544

<210> 9125

<211> 449

<212> DNA

<213> Homo sapiens

<400> 9125

actgagaggt aactttttat caatcaaacc acatacccca atttaacacc tttcagtgt 60
ctgaattcaa ctgacagact aaagggtgtt tcctgtaaca gtctgaaata ttaagtgtt 120
ttttgtttt gtttttaaatt cttatttcan aaaacttcct cttggggtag gaaagtacac 180
atgaagcanc aaagtaacga aaaaaaactt aaatagggcc ttcaganatc ccacacacta 240
caaagattct gccaaagccat aanataagtg tgaagcccag tatatgtcca gcttttctcc 300
tcaggacatc ttcagtgttt cttctctttt aaacaccaca tcaggttcta gccacanact 360
tgtgttttgg gtgtgcctgc tttgangggg ccatgcccان tgtgtctgct ggtgaccaag 420
accancagta atgantaacg ggcgccctc 449

<210> 9126

<211> 449

<212> DNA

<213> Homo sapiens

<400> 9126

ctttctttct ttttttgtgg gtacaacaac ctgtagccac atgagccgta tctacccagg 60
anattccttg ccagattgga acatggagat gaacaaagct gcttctggga agcccatttg 120
gaaaaaaaaag anggaactan aaagctgcca agtcaagctt ttgaagcgga nacaaagtca 180

aaagtttaga cctccctccc aatgctgggg atgggctgac tgtttaacca tgtgcacacc 240
 aacccagtgc acaccaggta cagtgtgaca ggggtggctat ggcctaaaac atgggttttg 300
 caggcaggct gacgtgcatt caaattctga ctcttcctga ccacacaaca tggggctggt 360
 gatcttgact cttnaacct gtttctttgc anaaaaaaan ggggcaataa taataccccc 420
 tcttaagggtg gantganaat tactttgca 449

<210> 9127

<211> 501

<212> DNA

<213> Homo sapiens

<400> 9127

acacttttac agtttaagaa atattaaatg tgataactgt tcaggatcta ctttttacac 60
 aatctcagta acgtatgtac atagtcccaa aaaaaaaaaa gcagcatttg cctgggaaca 120
 catcactata agcaaacaaa acatcaaatg gcctgaattc taaaatacct ttggattata 180
 taaaattaca ttgtaaagtt acaaatgttg ctcatcttg anaaatgttt gaatgtttta 240
 ataatgttgc cataatacat attatttcac gacattaaaa aaacaatgg tgaatacaag 300
 gtatcatcat ttttaagggt aagagataaa gcaagtacat atacaaatcc actggaaaag 360
 ctaagtttgg agctgatttc ctctcttgaa ttgtaaaatt tcagtaatac acagtcacta 420
 tctactgctg gaataatgcc tgagcaattt aggttganga tacnaacnat aacaaaaacc 480
 tgcccnata ttcaacttgg g 501

<210> 9128

<211> 460

<212> DNA

<213> Homo sapiens

<400> 9128

aggtttctaa aatgaatgtt atttgatttc atcatatatt aacagatttt agtaagttgt 60

ttttaaacta gaggaattga ggcagagaga aatgaagtcc ttttactgga aattttcatc 120
 tcttaatgtg ttaattgatt gattttttaca catttcattt taaacatgga aatgatgaag 180
 gttctaattg taatgagtag ttgtttttgg attgttcagg tacactgcct cttttcttca 240
 gacactgggg ctctttttgtg gtcactgagt attactgttt tttcaagtct tcaagcacat 300
 ctgtctttgt gatttttgcc catgcattgg ggattttacc tttacctgca aattttttct 360
 gatattttnc ttcnanattt gatctgaagt gaganacaaa ccatttccag tatanctgga 420
 tggaagtatc tggggtgatg ctccacatgg cataatcccc 460

<210> 9129

<211> 479

<212> DNA

<213> Homo sapiens

<400> 9129

cttgtgaaat cattgctttt aatcttttaa tctatccatc tttaaaaaga ccctaaagga 60
 ggggtctttt tgtccaggaa gaacaataaa aggctgtgga aatacatcca gaatatacaa 120
 ctaaatacaa aaccaaagc agcactgaat gggcaagaga aagatatttg cggaggataa 180
 aatggggaaa acacatcaaa atactaaggt taaaatttct ctaattaggc agatataaaa 240
 tgacactgat gagggatat gatagccata ctcccaacaa ccaaagttat aaagcaatac 300
 gtgctcccca aataacaagg aaaagaattc tttctattcc tttgttccc cgccccatcc 360
 cttgaatatt aagcatgaac actgtacatg cataaatcnc ttttacaagg gccacncgat 420
 nanatcacac aaagtctcat tccccaaaa ataaattctg ggtcgtgggc nccttacca 479

<210> 9130

<211> 601

<212> DNA

<213> Homo sapiens

<400> 9130

aaaaggcaaa caactttaat gggtattttg ctaaagataa aactctgggt ggtaaaggaa 60
 ttaaaggcag antctcaaag agatatttgc acccccggtg ctgtattagc actactccca 120
 atagtcaaga ggaagcaagc caagtgttca ctgatggagg aacagagtgt ggtaacgcaca 180
 tgtaacggaa cattccatta tatgtataat acaggaagga aatcctgtca cctgacacaa 240
 catggatgaa ccttgaggac attatgctaa gtgaaataag ccagtcacaa aaagacaagt 300
 cactgtatga ttccacttat atgagatact gagaatagtc caaaccagag agacagaaaag 360
 canaatggtg gctgcggggg ctgggaagaa tgggaattac tgtttaatgg gtacagtttc 420
 cattttacaa gctgaaaacc tatggaaatg gacggcggtg acngccnccc acattatgaa 480
 tgttttaaca ttaactttct gaactgtccc ttaaaattgt gaaaacatat ttttttnnat 540
 tttttcaac aatttnaatt ttnagaaaaa aaccaacccc ccnngggttt ttggcccttc 600
 c 601

<210> 9131

<211> 512

<212> DNA

<213> Homo sapiens

<400> 9131

aatgctgcat ttcttggttt tatttgaac agtgcataat tttagcattt tatggtagga 60
 ttttacactt gtcatttaca caaattacaa gtttctgctt caagttttta aaaaaaattt 120
 aaaaattcag cccatgtgca gcacaaaaat atgcaaaact actttacatt atacacactt 180
 tttatcaaag gaaatacaaa attctggctt gttgttttaa acaaatacaa naagcttcaa 240
 actaaacaca aagggttaac attaattctc aaatataagt ctgcactttt gtgtttagt 300
 tctctgaaat gtgaatacca aattcctaag ggattttaat gttttccttt gaaaaggaaa 360
 actaaaaaaaa ttcccgtaaa caantccctc cccatcagct tggcttttcc caaccctact 420
 cttggttccc ttaatgccan anacttgcac catgtttaca aattgggggt gggcccttaa 480
 tcntacaagg aacaaatccc ttttaacttcn cn 512

<210> 9132

<211> 454

<212> DNA

<213> Homo sapiens

<400> 9132

```

gttttgcaac caccatcaa taaactttct tttttattat taattggggg cagggtttct 60
gttcttgcaa ctgagtccta acagaaaaca atggtttcgc tgaccacacg gagagctgag 120
gacaggacaa aaaggcatga gacagctgga cacctggaga gaggtgacac aggacagagt 180
cctcaccggg ctgccctggg cctcggggag ctcaggctgc agtccctggg cctggtggca 240
cccacagcac ggcagtctct ggctgggctt cggggagccc acatgtctga tcggcaaggc 300
ttggctggcc aggcggtggg caccaacgtg gtgggtgggc agtcctgggc ttccaggagg 360
cctcctggga ctcaagctct tcagtggggg gtgcctgtca nggtgcangt gggttctgtg 420
gctacactcc catcctgtct tccctctgtg tncc 454

```

<210> 9133

<211> 502

<212> DNA

<213> Homo sapiens

<400> 9133

```

ggacaattgt gaacgttggt gtccattct tttttctcc aatttcttct gcttttcacg 60
ttccattttt tcaagacctt cgcgaaatcca agcgggaaga ntcctgcgtt ttactgcgtc 120
aatttgtgga ngctcctgct tcacaggaag tgcaataggt gaacgctgac gatccctgaa 180
tgatgatggc ctttctcttc gattctgggg angtgctgga ngtcctggan gtcctggttg 240
ccaataagga ggatgaaatc caccttgcgg tggacaaaa gcagcccat gctgatagtc 300
aaactgggtc actggcccca ctgcaaaatt atcgggtggt ccaccaaagt tgtgattggt 360
ctggttaaat atatgcctgt tgcaggggc aaattcccca ctgtcctgac tgttgctgtc 420
ttcanaaagt ggaacaatgt ccattgggcc tgggtgtngt ggcatccatg gcttaatctt 480
gaaggggggt ttttnggnt cn 502

```

<210> 9134

<211> 508

<212> DNA

<213> Homo sapiens

<400> 9134

```

aagtttattg tatatttatt gtaaattgtg tgcattattg attagtctgc ccaggactgc   60
cataacaaaa tacttcagat tgggtgggtt aaacaacaga aacttgtctt ttcacagttc  120
tgttttctgg aagtccaga tcaaggtgct ggtccgtgtg atttctgggg agggctctcc  180
ttggcttgcc gatggcctcc ttctctggtg cangcacggg gggagagcaa gcganccct  240
tgcgtctcct ctcanaaaga cnaatcctgt tggatgaggg cccaccctc aggaccgatg  300
taaccttaat gacttctgta gaggcccat ctccaaatac agacatgctg cagttaggtc  360
ttcagcattt gttctttaat anaattttca atgccagctt gcaccattaa gtcattgaca  420
ttcttctgta aatcctcaat gnaattccc atttcttccc attacantgt ttaagggcnc  480
ctgcttnaaa ctggaatcca aaaccncc                                     508
    
```

<210> 9135

<211> 498

<212> DNA

<213> Homo sapiens

<400> 9135

```

attagtaaga gagtttattt ggggattaat acataactaat ttattttatg tgtagcaaac   60
agaatccacg ctagctttta tgtaattaat tctctttggt tccaagtata gatccctcat  120
gttttcctca catgatctct ctgtgacaca tttctcccct ctgacaggcc taccatgacc  180
ccatgttaaa gttgtccatc atgtcagaag angaactcac acatatattt ggtgatctgg  240
actcttacat acctctgcat gaaggttaga tgtgccactt aattgtcatt aaatctaaag  300
ancagcgggt catgtaattt tcagtctaaa cttctaattg agtgctgacc tattttttaa  360
    
```

ataaacctgt taatgggtgt tatgcttttt taccattca gatttgtga caagaatagg 420
 aaaancnacc canctgatg gaacagtgga acaaattggc ccattctcct ganctgggtt 480
 tntttgaatt ttigaccc 498

<210> 9136

<211> 467

<212> DNA

<213> Homo sapiens

<400> 9136

gttcctctac ttttaagctgt ttgtcaatc gggctattaa ctgggatttt aatcctttgg 60
 gaactaagan ctgcactttc taattctttt cggaggtcat ttacctcat tgtcttttga 120
 tcaagtttag accaatgggt atgtgtaaaa atttcttttag cttcaccatc atccttctct 180
 tcttcatect gttctccatc agcctccttg cgttcaccct gaagcttctc gaccagctgc 240
 tgcttgtatc ctgggganan ggtttccac tctganegg tggaangca atgccaaaca 300
 tccgggaaaa ataaaaccac tgtctccaca tgagctggaa ctgtacgcc cttgtgggtc 360
 tcctcacggc gatggtacga atctctgcaa aacggtacca ttgtttgcac cacttaaatn 420
 aatgcctgtt caaaccttc aacancaaat anctctttt tcnccc 467

<210> 9137

<211> 503

<212> DNA

<213> Homo sapiens

<400> 9137

aggtaaaaa tagattttta ttttattaaa aatataattt aatgcaggtt gtttgaagca 60
 tctgtcttca tatgatggca ttagaacacc ttggtataat aaaaagttac cgtaatttat 120
 gattatttga atttatccat tctgaaaatt aataanatct aaaactggca tgacaatcaa 180
 natttgtatt tagtgaaatt taaaataaat gtnagccata gttaaaactg ttgctgcatt 240

catgaatgcc cttaggaaaa ggtccacagt aaaatcagaa agctgaacct ctcctgctgt 300
 ttataggata tgtttatgct gaattaattg ccagggtttc ttaaactttt agggaattat 360
 actttggtgg ctcnatagta aattctacaa attatittta aattgatttc ctticcttan 420
 anctgcanga aaatatctgg caaggtgcat ttaatatittg gaaaaaaaaan atgaacngtt 480
 acctacttta ggaaaaaaaaat aac 503

<210> 9138

<211> 468

<212> DNA

<213> Homo sapiens

<400> 9138

acaaagcagt tggggcattt attgacattt aaacaagggg aggagatcct gaacactagt 60
 ctcgctcagt ttataaaaac ttgaggccaa actctccatc atctgtacac agcttaacca 120
 cggncaggan caagaattcn agttaaacga attgaaccag tccaaccaca anacnataaa 180
 gggaacagg gcgtggggat ttccagtttt tcctttttaca ttacaaagtt tccaacacaa 240
 gaagccaaca ataccccagt gctgcaccaa gttacttccc actgtttccc nagnnacagt 300
 caattaataa tcagtagtcc aagttctaan aacatttcct ggaaaacaag gacgcacctc 360
 ccgtggctct atgcatggcc tgccactgat gaatcaaatt cttagaacc tacgaacgtc 420
 tgataccttg aaganaacnc ccccctaaaa tctccnncat ccnggcc 468

<210> 9139

<211> 435

<212> DNA

<213> Homo sapiens

<400> 9139

acaaaaaaaa attttttatt aagtgtgaaa gcaaacagg tacatctatt taaatatttt 60
 ttacatattt atagatacaa caaagacaaa taacttagca aaaattacaa gtttaaagaa 120

tagtactatt ttgaaacagc caatatagta tctgaaaata ttccatttta tccataatca 180
 gtgagtatta tticcaaaaa aagtaacttg cattttcttg tgaaaaatat ggtttttttt 240
 ttanatgtct gccaaaggatt tatcanaaaa gtccatcttt ctaaacctaa aaaattgtaa 300
 tgcctttatt gaaaactttt ttacctaata ggcttttaaaa accacgtggt ttcctttgga 360
 cttaggtgaa ttctaaatct ttacttcact ttcaaactac agggnatcga cattaacnaa 420
 aacnaatcnn attga 435

<210> 9140

<211> 427

<212> DNA

<213> Homo sapiens

<400> 9140

atctgtgaga gattaaatat aaggactggt tttgttggtt gagacaggat ctggctctgt 60
 tgcccangca acagtigtgc agtgatacaa tcttggtca ctgaaacctc tacctcttgg 120
 gctcaggcaa tcttcccacg gctcactgaa acctctacct cttgggctca ggcaatcttc 180
 ccacggctca ctgaaacctc tacctcttgg gctcaggcaa tcttcccacc tcagtttcct 240
 aagcagctgg gactacaggc gtgcaccacc acacctggct agtttttata tttttggtaa 300
 aaataaagtt tcgccacatt acccaggctg atctcaaact cccaagctca aaggatccac 360
 ccncctgaaa tctcccacaa tgctgggaat aacaggtttt aaccactnt tcctggccaa 420
 ggttnnn 427

<210> 9141

<211> 399

<212> DNA

<213> Homo sapiens

<400> 9141

ccacaaaaat gtaatatata tttaatagca cattataaag ttcctgacca aagacgttga 60

tttcctaatt ataatagcac agaaatcctt tagaatttag taaacgtaat taagactatt 120
 cagaagtaat gaaaaaccaa tatgataaaa acaaaaatcc tccagtaaag aaggaacctg 180
 tccatttgag anaaatacaa ttgagaactt gcaaatgana caagggaaga tggcaatttg 240
 gaactgcaat agaaataact atagcagaaa caaccattta agaagtttta gcagcaataa 300
 gtatttatta ttctgaatga aatgtncagt tgacttttat ataaaaatcn tcnaagtgtc 360
 atattggatt atttactatt aantttaccc cccaacngc 399

<210> 9142

<211> 490

<212> DNA

<213> Homo sapiens

<400> 9142

ctggagaatt gtacatgttt tattgggaat atattttttc ttctgaatc tgttatgaat 60
 gcattgggtg gctgggttca gtaataaata tgtgagaact ttcattaaaa aaaaatacaa 120
 aaattagctg ggcatgggtg cgcacacctg tagtaccagc tactctggaa gctgangcgg 180
 ganaattgct tcnacccaaa aagcggangt tgcagtgagc tganatcgcg ccactgcact 240
 ccagcctgtg tgacagaatg agactttgtc tcaaaaaaca aacaaaacat gcacacattt 300
 aatcaatata aaatattatt tctgcgaagt cacttcaagc tgatactgca tactccatat 360
 atgctaaact tcacaangtc tttacctcat acctgantct ctttcctgaa cccccgcggg 420
 ggtaattcaa tncctgggg gtnccttacc cccttggtac tacaaccttt gggcnccagt 480
 ncgtttccac 490

<210> 9143

<211> 542

<212> DNA

<213> Homo sapiens

<400> 9143

ccaatggaaa aatctctaaa cctcttagag ttttattaga catttcatgt acagaagtta 60
 atctagaaaa atacatttta aaaatcttca acagaacatg ctccctgtaa caaaaccttc 120
 caaacctgt gttttattat acaaagcaat ctacattagt angtaaaaag aaattctcaa 180
 atttagcaat gtcattttcc atccaacatc catctaattt acagatgggt ttccactatt 240
 catactggaa ttagaattct gtaataaatt ttttctaag ttttctgtac atattaaata 300
 acccaaaagg ttcctcttgt agtgcattgt ccatttagca agtctattca gtatttttcc 360
 agtaccattc tcattacagt gatttgcctg taaatgtag ttaatatcta aaagtgcaca 420
 cagttaactt tcccaaataa cggactattt ctgggaggaa acctaattt cacagaaaaa 480
 gattaccant aacaatgaat tanaaaatnt ngggttgaaa gttctcctga aaaacatcca 540
 cn 542

<210> 9144

<211> 297

<212> DNA

<213> Homo sapiens

<400> 9144

ggctcttact tgtttctgtc tccttttcac agggaacact tccacagggt ggggaacctc 60
 ccccatgggt aacatgggtca gggctgcctc aaatctggag gctagactta gcactacatc 120
 aganctgtgc cacttcacac tgacaggcag tgtttaanaa aaacatctca acctgccagc 180
 caacgaaaat ggggtgacaag tcanaatgtg gggcagggat gtnttaaagt gaacagaant 240
 gctaacaaat gcctcctcaa gctgtaanan tcacatgggg agacagtggc aatgtgt 297

<210> 9145

<211> 284

<212> DNA

<213> Homo sapiens

<400> 9145

aaatactaga aaggccataa tgaacttaaa ggactgattt gggtttaata gtaagggatg 60
gcttgagtta ncaatgaatt aagggaagac tantgttaaa acaaaaaaaaa accaaaaacc 120
acattcaacg aattgaagat actcaagaaa acctgcagaa aataatatga aaattaaggg 180
gaaacctgan tgtgttttaa ggcanatta aataaagctt atgttttatg gttganaganag 240
tcagactaat aaacaggctg tttcanacct aagttaggca ctta 284

<210> 9146

<211> 352

<212> DNA

<213> Homo sapiens

<400> 9146

cttttttttt tttgtctttt aaaaacatcg taacattaac acatggccgt tcaccgtccc 60
ccagcgatgg gagctggcct ggggccagg gtcctccagg atcttcactc attcacagta 120
acggttctga ccagtcctcc aggtcgacg tggatgccac aggggtgggg aaggaagaag 180
aaattactnt cccaccttca naaaaaaaaa aaaaacaaac aaacaaacnc tgctanccac 240
tcacctttaa aaaccccatg gctatggcg cctgcancgg gcgggggtcc atttgcttgt 300
tcttnatac aaaaangcag aaaatcccc cttaccaaac attnnaaatc ct 352

<210> 9147

<211> 221

<212> DNA

<213> Homo sapiens

<400> 9147

gtttgttagt tancctggcc tcanatcagt ccctctatct ctggtctaatt gttgtaactt 60
ctttttctct tgggtatntt aggccatgta tntggaaatt ngatgcatgt gacccctat 120
ggcacagtct gacatttctc aaattcacct canttctat ctctggttct ggaaattatg 180
aantcagana gccccatgaa ggcttaagtn tacnggcac a 221

<210> 9148

<211> 455

<212> DNA

<213> Homo sapiens

<400> 9148

```

ggaanaaaac atttgcaa attttatctg atgagggttt aatatccaga aaatataaag   60
aactcctaca actcaacagc aaaaaaagac aacccaacta aaaaatgggc aaaaatgtga  120
ataaatatatt tcccaaaatg acataaaaat ggtcaataag catgtgaaag gattctcaac  180
atcattaatc attagggaat tgcaaatcaa aaccaaactg aaatactgct ttacacctcc  240
tatgatcagt ataattttta aaaacagaaa aataaaagca ttggtgagaa tatggataaa  300
ctggaaccct actggaaatg tataattgtg cagtcattgt ggaaagggtt ggcagttcct  360
cnaaaagcta aatanaatta ccatatgttc ttggccttcc tccncctana taatactccc  420
agaaaaaaaa aaaaaagggt tttnaacaaa aactt                               455

```

<210> 9149

<211> 392

<212> DNA

<213> Homo sapiens

<400> 9149

```

aacaatgtaa atgatttaat ggtcacctga gtggtgtatt tgaggagtac aggtttcctt   60
gtaggatttt tttttaaggc atccattgag aaaaaagaaa tgaacactat cagagaagaa  120
tcctgatgga gatactgttt tgggctagag gtattgaaga ccccttaaga taaaaaatgc  180
atgacttggc tcttcctca gagagctcat actaggtggt caattcacat tggtttctga  240
atggcttgaa aacaatgata tccatttca gagggctgag actggatcta gaattggcac  300
ttcaatgctt ggcagtactt ttgatcttct aatatgccct cttgttttcc anaacaatat  360
tgacaacgat aattcattga aaatttacnt cn                               392

```

<210> 9150

<211> 327

<212> DNA

<213> Homo sapiens

<400> 9150

```
aangtgtaga gatgcattct cactatgttg cccaggctgg tcttgaactc ctgggnctca 60
agtgatcctc ccgtctttac cttccaangg gttgggatta cagggtgag ccactgcacc 120
cagtcccatt ttacttaa atcaaatca aatcttcagt gtntactta ttttgggtgt 180
taattccatt atacaccgtc ttatttcatt aatttccata ttgtgccaga caagatataa 240
aaataattca actccagnca ataatnccat ctgtcttcat gtgaccagaa taannagctt 300
ctgctcccaa natggaagcc acagtaa 327
```

<210> 9151

<211> 446

<212> DNA

<213> Homo sapiens

<400> 9151

```
gtgaaaggggt gttgaatfff gttaaatact tttcctgtgc ctaatgaagt gatcttgtaa 60
attgtaatff aatcttatct attctcatgt ccaaacactc aaganaaaac tataaggaac 120
tatatttaca aaataaatca taactttaca aaaagggcat aaaatagcat tttggcaaaa 180
acttaactta ggtaatctga aggtatctaa ctgtatcaat tttaaaaata taaaaatata 240
gctttatgac gaaatfffft ctgattaaaa aagtaaaact tcatttgctg gttataanac 300
aatatgttca tttanaaaaa aagtggacat cctgggctaa catggtgaaa ccccgctctt 360
actgaaaaat acaaaaaatt tanccnggcg tngtggcggg tgcctgtatc ccacctactt 420
gggaagctna agcaggaaaa ttgcnt 446
```

<210> 9152

<211> 406

<212> DNA

<213> Homo sapiens

<400> 9152

```
aattgcacat ctgttcacag aggttggcaa aagacactgg aagtgattgt gaaatccaca 60
ttgtgattcc tcaggaatca gatcctagaa gggggtgccc agagctgtcg gcacaccgtc 120
ccaggagtct gcctgtgcag ctcccagcca ggcaagaagc cctgaaggca gagtcccagg 180
tggacacagc tggacgcctc tctgacaatg gtggctctgg tggagaacct ctcggtgtct 240
cttctgcacc tctcaaggct gcaaagtgcc aaatactctt ttccaaccag ctcccgaatt 300
ccccctcca tctgggactg catgtcctgc ttancgattt caagcaatga tttcaccttt 360
tcatanacaa ggacattgtc ctcatcaggg cttgcaccat cncctc 406
```

<210> 9153

<211> 550

<212> DNA

<213> Homo sapiens

<400> 9153

```
gtatagcttt caggaagcag gaagactttt ctctttttta atgatagaac ataaatactg 60
aaacaatgac attggaacat ctatccattc ttgtttcggt ggaaagtcta tctaattcag 120
cttctggacc gactgttcgt ttttccatga tctcttcctg caggtttgct agaagtcctt 180
ttccccccat aaacaccttc ctttgggana tttgggtgcc ttcctttttt aaggttttta 240
aaactaaaat gatttataga ctatccgtat cctgtcanag ttgggcaagt gaatggatca 300
tatttgctg ggtcactctg attataggac ttcactgttt cttgaactaa aagtgaaga 360
tttattattc tattaatgct cataaagtca ctcttttgat gagccataac ttctctttat 420
gaagantgtg tatgccagtc acctatgata agganaaaaa aatccanact tctaacatat 480
tccctcacat tccctgcaac attaacagtc ttgaaacctt atntaatccc agggganaat 540
```

gccccnggat

550

<210> 9154

<211> 401

<212> DNA

<213> Homo sapiens

<400> 9154

cagcacaata ttccatttat ttattgtata agtttggcaa acagcacaaa aatccagcaa 60
catttaaaac atataaaaaa gtcaaagtct aaacaggact agggattttt ttttacatca 120
ttagaaataa cgagtacaca ttttaagatt ctgcaaagct agcaaaatga anatgcttgc 180
cttctgaaca tatactacaa acacacatac aaaaaaaca tataatttat ctttacaaaa 240
attacagcca agcaatagaa aagaaggatg ttatgatga agatagcaac acatatgttt 300
agtacatata tcttacacat tgaaatgcta catcttatac cctgaaatgc catgtgtnta 360
gagccnngca nagtaaattt aggtctntta ctggaggtta a 401

<210> 9155

<211> 581

<212> DNA

<213> Homo sapiens

<400> 9155

ctagcaaagt ggtttattct ttcaacttat tgctggaaga agtcctttaa acaaaccagt 60
gcanagaaaa tgcctatcaa aagtatcagt ttttcagctt tcttcaccac tgcttttagat 120
gtatcatttt tataatttta tctcttcatt tttttaaaga gctgctactt cagatgacag 180
taactctttg gtgtttattt ttatttccaa gattgtgatt tttttaagag gctactttaa 240
ggctgtgaat tgtctcactg tcttttcact ctctcttttt agttcttcaa tatgggcac 300
caagcgctct agaatgtgat gagacctcag ttctctctct tccaaaaatc tggtagctat 360
tgaaccaagg ggagatacag gcaaggaaca ctcatgtnaa cccaattcca atttcatcac 420

catttcagaa agatgacgan tttctaattt gagtgaccca gctgatccaa aatctcetta 480
 tgctctactg ctttgtcttc tgccttttgc tctctgctct gaatcccttt cctntntga 540
 agaaaaacct ttggtggaan ccatattgan atccccccga n 581

<210> 9156

<211> 435

<212> DNA

<213> Homo sapiens

<400> 9156

ctcattgtga aagattttct ntntattatc aaatctctgc tatagaaaca ctgaaaaaaaa 60
 tgggaaaaaaaa aatcactggg anangcagca taaaatgggtg gctgaaaaca anaactctgg 120
 gagccaatct cagctctact cccttactag ttgtgccccn taggtaggat ccttcaacat 180
 ctctgcttca actnagccat ttgtaaaact ggggtaacag tacctatctc agagtaaagg 240
 ggactaaaca agttaacact tggaaagcat ttaaaanaaa gccagcaca taagtgttat 300
 atgtatttgt aaaacttttt aaaaatctca actgggttaa cttttccatg gatctttcag 360
 gtccttacc atatacattt ttttanatgt gttacantaa gtatgtatat acaantctgt 420
 anccttttta ttccn 435

<210> 9157

<211> 512

<212> DNA

<213> Homo sapiens

<400> 9157

aagatggagt ttcgctcttg ttgccaggt tggagtgcaa tggcgcgac ttggcttact 60
 gcaacctctg ccttgcagtt caagcaattc tactgcctca gcctctcaag tagctgggac 120
 tatagacatt caccaccaca ccagctaata tttttgtatt tttagaaaat tttgtatatt 180
 tanaaaaggt ttcacatgt tggccaggct ggtcttgcac tcctgacctc aggtgatccg 240

cccacctcag cctcccaaan tgctgggatt acaggcctga nccactgtgc ccancctca 300
 agtnactctt aaacctactg aagttagaca atcaataact gaaatgacat catctttctt 360
 gaatgtttta ggaaataaaa ttccttcttc tgacaaactt taaatgtgtt cttganttcc 420
 ttgcctcccn cttcctctgg gaattttctt ccctanctgc tcnctttcat tatcaanaaa 480
 atattccctt cccccctttt accttatacc ta 512

<210> 9158

<211> 468

<212> DNA

<213> Homo sapiens

<400> 9158

cataggtaaa atttttatct atgaatgtgt ggacacatga ctttggatcc agccagccag 60
 tgacataaat aaacttgagc aaaagtttca agctaganga tatatatgta tagaaaatta 120
 tatatttgtg tgtgtgtgta aggcctcttg gaacagtgcc acaaacctgg acaccaacca 180
 acanaatcct cccgtccttt gaaatttcca ttaanagcac aatgggggta attataccag 240
 gatgctccaa tcgctctttc catcttgtgc actcacatgc ccgccaaca tgaaatgttc 300
 gcctgctccc ttccaatgtg atggttggtg aacttatctt tagtgtcatt tgataagcct 360
 ttgtgctcac anaananaca tcccactgac ccagccactg gtcatgtct ataccagttc 420
 acatcaaagc aggcgccttt gtcaggttcc nctcnaatat ccattccc 468

<210> 9159

<211> 223

<212> DNA

<213> Homo sapiens

<400> 9159

ggtaactgct tctttactac ttgatgtna aaaagtgtta gcttgctacc taaagtaagn 60
 tttttggcta atcagcaaan tccatttcca aggncttcaa gtatgatctg gccaacacca 120

cagaagatga aaagcagaat cccacggttt tgganttggt gcancggaaa ctacatgaac 180
tcggantcag gangtccagg gtctancact catctactcc tga 223

<210> 9160

<211> 330

<212> DNA

<213> Homo sapiens

<400> 9160

gttttctact gaaacttatt atttgccatt aagaattgca aactatacta ctaagaatga 60
acaacattct cttcattaag cctttttcaa aacacacgan acaaagctcc ccttttggtca 120
agggtgtccca cacattacca ctgcagctcc cagcacagcg gcgcaccatg aactcggacg 180
tggagcccaa ggaatggaga tcgcaccagc cttccctgct tccccacccc aactacaccc 240
nagggagaaa ggatacnang aaatacccta tgtcttcaat gcttgggggg ctgggggtgt 300
cctctgctac caantgggcc ggtcantgcc 330

<210> 9161

<211> 517

<212> DNA

<213> Homo sapiens

<400> 9161

gaagtccaac ctggccatcg ctttatattt ctgcataaga naagcacagt tganatgctg 60
gcttctggct tcatacctgt gctaaagcaa ggcttctttt ttccttatgt tacttttttg 120
agacaaggct tcactctgtg acccaggatg gagtgtggcc acacaatcat agctcactgc 180
aaccttgatt tcccaagctc aagtaatcgt cctgcctcag cctcccgagt anctgggatt 240
acaggcgcac accaccaggc ctgactcttt ttttttccct ccggtanana tggggctctcc 300
ccatgttgct canactgggt tcaaactcct gagctcaatg atcttcctgc ctcggcctcc 360
caaagtgtg ggatttcagg tgtgagccac catccccgga acttttcttt tcaaaacata 420

cattaaaatg gaaatgaata ngaacancca gtggctgtga tgcaccaaaa cccctgtctg 480
gaaacatgcg tctangttat cttcccnct ttgcan 517

<210> 9162

<211> 599

<212> DNA

<213> Homo sapiens

<400> 9162

aagattttat gtaatgttta tttttttaat tcccatccta actttggctt taatccttac 60
ctctcatttc cattcttttc ttgaaatcc aattaaaaaa aaaaaaaaaa aaacaaagtg 120
tttaaaatca caattatcta aagtcataat aaaatttinct tgtctccaaa nagggggaaa 180
acacaccact tttattttta tgcagcattt tcaaatatgc atgtcaatat atatittata 240
aactatitaa aataaaaacc ctncatcctt tgagggttatt gacattttct agttcactga 300
cacatctccc ataatacaat agttctattc attttcatga atgaggtggg aactacacta 360
aaaagtagga ttttaatccc tgaggtgcca gttaaaatgg gacnangttg cccttgcaac 420
acaanatttt aaaaatcagc cttaaataat aagcatggat catgctattt gaatcaaaat 480
ccctcccata gcatgaaatc ctttaggaaa tggcatttat tgggttaatt caccngctat 540
tcccaccnc agctataaga tcttcctttg gcnaggaata cccaaccag gaattttct 599

<210> 9163

<211> 480

<212> DNA

<213> Homo sapiens

<400> 9163

aagatggagt ctactctgt caccaggct gaagtgcagt ggcatgatct ctgctcactg 60
caacctctgc ctctgggtt caagcattc tctgcctca gcccccgag tagctgggat 120
tacaggcacg tgccaccatg cccggctaatt ttttttgtat ttttagtaaa gatggggtct 180

caccatattg gtcaggctgg tcttgaactc ctgacctcgt gatctgcccc cctcagcctc 240
 ccaaagtgct gggattatan gcataanccn nccatgcctg gcctaaaaaa ctttgttttc 300
 tngaccatac ttatcatggc tccttgata caaaaaaatc ttgggctcag ttaaactttt 360
 atggtctttt atgttaccaa gtactgaaac tgggtgaaca cnagccacaa attcctgaat 420
 nctgttcctt ggtgataatg gaanccaaaa atctccaaaa atcnttttta naaattgcta 480

<210> 9164

<211> 204

<212> DNA

<213> Homo sapiens

<400> 9164

catattggtt gttttgtggt ggtaattgag ctgggaaaaa ttcaaaattg ggtcataatt 60
 aatggtaact aaacanattt gtgaatatgg gacatctgtg gtcttgaaaa catcagtatg 120
 attgtcccc atatttcttc ancctggaca ataaaaacan acaggggagg ggggtaaagt 180
 gcantaaant acgttgagtg atnt 204

<210> 9165

<211> 376

<212> DNA

<213> Homo sapiens

<400> 9165

cacgttttat agtcctttta tttgaaattc agtgtaaate actcttaaac tataaattca 60
 cagttgttgg aggttttttt ttactttaaa tgatgtgaaa gcatttggtc cattcaaagg 120
 cccctatgcc tttgaatgac atattctcag taacttcttt gccagtaact anagtatgtg 180
 agactgagta actataatgt gcatatttca anaattagct tcccgtgca ttataacaca 240
 tttcctagga aagcctttgt atttttcata gccttttcac atatccctca tttanaant 300
 cacagtgttg cagttttact ttgtttcana ngggaaggcc atcttggttg cataaggggg 360

acanaaaata taatat

376

<210> 9166

<211> 356

<212> DNA

<213> Homo sapiens

<400> 9166

gtanatgatg gggctcttacc atattgccca tgctgggtgc aaactcctgg gctcaagcaa	60
tcctcccacc tcagcgctccc gagtagctgg gaccacaggc acccaccacc atgccacact	120
aaaatttttt ttttgggggg ganggtaaaa aangggcttt accatgttgc ccaggctggt	180
gtcaaactcc tgggctcaag cgatcctccc acctcagcct cccgacatgt aaacgggtggc	240
tacatttccg cacaatcccc gcggctctccc tcattctgtt ttacaactac tcccacataa	300
agtaacgtan aanacaanc cccgttattc ccttanaaag tagactggan cttgca	356

<210> 9167

<211> 473

<212> DNA

<213> Homo sapiens

<400> 9167

acattagtat ttacatttat ttaacgtatg cagtttacac actcattatt aaacaaaatt	60
gggaatgcaa acaaataatc aaataccata agcattatca aataaaataa ctggcactag	120
tggtataagc atattaatgg acctgggtaa ggaaaagtga tggaagaaga ctgcagccca	180
tggcattttt ctttttacc aagaaaaacg ctcagtagca ccataatggt aatacttaaa	240
agaaatacat aagatagaac attttaactg ctatcattga ggtaaactg cttttattta	300
agtgaattat acaggaaatt aacagtacag gcagtatttt ggccaacttc tgcttatgtc	360
agctgancat tgtccataaa caaaagcnaa agaaaataat gctaatacata catggaactt	420
ttgttcttgg gtacaattcn gcccctgcc ttgaattcct nggntggnaa aaa	473

<210> 9168

<211> 452

<212> DNA

<213> Homo sapiens

<400> 9168

```

aaatagacag ggtcttgctc tgttgcccag actggagtgc aatggtggaa tcatagctca   60
ctgcagcctc aaactcctgg gctcaaata tgcctccaca tctgcctccc aaagtgttgg  120
gattacaggc gtgagccacc acacgtatcc ggatccagtg cggttttaat gtancataag  180
agttgaacac tgattaaaac ctttttcata ctcatcaata atcaacagca ttcattagat  240
ttttttctgg tacagtgtct ctggtactga atagagttgg tgtacacact aaaggttttc  300
tcacattcat cacattttga ctgtcttctc cacaatggac ttcctcatga atagtaagtt  360
caganagttg gctacaactt ctgctgcact gaacacactg gtagggttnc tctcancat  420
gggttttctg gtgttcaata anacantac at                                     452

```

<210> 9169

<211> 439

<212> DNA

<213> Homo sapiens

<400> 9169

```

aaaatgggga aggtttatta aggtttttcc tcaagaggaa cagccaatct cttgcttctt   60
gagagaagca attaatggga aatgntgtc acaccttggg cccagaacca caggaggccg  120
cttctcagca tgcccaacga acatacatca tccccaattc ccatttaaag ctcattaatg  180
tctacaaaac agaatccacg ttgccttccc agaaaacaga actaggaacc cagtcaaagc  240
ctccagctgt tctcaacaag aatatttaag caagacaggg caataaatgg actgcacatt  300
caacaaaccc atgatgaaac tgcagtaaaa tccaggatca aagaaatgtc tggactacat  360
tttcaagaat aacttacagt ttttacattt tggggaacat aaatactaaa aactgggttn  420

```

ttagaacgcc tcaaancctc

439

<210> 9170

<211> 513

<212> DNA

<213> Homo sapiens

<400> 9170

gagatggagt tttgctcggt gccaggctg gagtgcaatg gcgcgatctc ggctcactgc	60
aacctctgcc tcccagggtc aagcaattct cctgcctcag cctcccaagt agctgggatt	120
acaggggccc gccaccatgc ccgactaatt tttgtatfff tagtaaanac ggggtttcac	180
catggctggt ctggaactcc tgacctcgtg atccacccgc ctcggcctcc caaagtgctg	240
ggattacagg catganccac tgcgcccggc cactaatcca tattacaaa ttaaagcctc	300
naaattaacg ttttatctca attatagtca ttctgttgca aggaactfff aanaacaatg	360
ttggttacca atgtnaccaa ataaatgcaa ctttaagttta aattacccaa gtggttacca	420
actgataact taaattaagg ctgaaggtna ccgaaaaaat aaaaattaat tccnctcct	480
aaaccggtnt ttaaaattcc naaagccacc aaa	513

<210> 9171

<211> 497

<212> DNA

<213> Homo sapiens

<400> 9171

acagttaaag aaaaagggtg ttatttaggc catcaactag gatcataata aataacgtaa	60
tataactaat taataacaga tcttctcatg catttatcgt gttataaat atagaagaaa	120
gctggcttac agggctgttg ggacaaattt ggaaaagtgt atttggaat tacacagtaa	180
aagttaacag tgttgactat cagattctct tttctgtcag ttttagaat acatccccta	240
tacatctgtg aataaatggt aatggtctct tagagtttct actttttgtg aacatgccag	300

agttaagtaa attgtcaaag gatccaggtt gacaatgtgt tatttgtcaa tattttctaataat 360
 gaaaaacaga tcttagaaaa atgaactctt ctgcatttca ttggtanagg ctgatatatt 420
 acaagccgga atcattcaac aataaaaaaa gtcctccatg aaataaaacc cnaaaattat 480
 ttatcnataa tnacngt 497

<210> 9172

<211> 525

<212> DNA

<213> Homo sapiens

<400> 9172

gagacagant tttgctcttg ttgccaggc tagaatgcaa tggcatgac tcggctcatt 60
 gcaacatctg cctcctgggt tcaagcgatt ctcctgcctt agcctcctga gtanctgana 120
 ctacaggcgc cgcacacaac gcctggctaa ttttttgtnc ttttagtaaa natggggcctt 180
 caccgtgttg gccaggctgg tctcgaactt ctgacctcag gtgatccacc cgcctcggcc 240
 tcccaaagtg ctgggattac aggcgttagc cacggcgccc ggccaagaat tttcatatga 300
 taggatgagg catgactctt tcaagtatta acaacgctgc anaaagtgag ttggcagcac 360
 anttgctccc agtgagacat tggctcttta ngggtttttt gtattttaaata tgaactgcac 420
 aaaatgaaac ggggccttgc caaaaaatcc tgggtgcttgc tccattcncc antggggggc 480
 cgtcnctgct tttgtcttca aaaacctngg acancctatt ccccc 525

<210> 9173

<211> 425

<212> DNA

<213> Homo sapiens

<400> 9173

ggcagttgaa aaaaatatat ttatttcaat ttgttggtaaa agtttattga nanccaagtt 60
 tgcctgcaag tgaaaaaaat gcagcaacga aaaacaggga acacggggca cataataata 120

ttctaanact ttgtgccatt aagttaaaaa tatctgttca taaaaaaatt gggttccttt 180
 tccacctccc acccccnaat tggaattttc aggcitttaa atttaagtna ttcccctggt 240
 ctgaggatat gatctcttgc ctttttttct tcaactgtta cttgtgaggg ttttaatttg 300
 aaatgataac ttaatagggt tctcttttga gtgaaatttc ccattgtagg cncataggaaa 360
 aacaaggcaa aanctgcant tagcgtctca ttttccatt tnaaaactct ctcggggcct 420
 nacct 425

<210> 9174

<211> 533

<212> DNA

<213> Homo sapiens

<400> 9174

gcaaaaaaaaa tcttttattg gcatgaaaat aatgttgtaa atggcaccaa atattccact 60
 taaatgcata tacagtatta nagtcaaaaa ctattttatc cctctttgct gtttttcccc 120
 cttctgceca ctttcctggg tgttgggggg gcccgctgac aacagtcaca aatccagcga 180
 cctgatggaa tagcaccaag gccacacaa aaagtatgat aacctctgtc acacatatca 240
 canaacatca tttcttcttc atggtggggg tgtccacata taatgcatgt tttacattcc 300
 atacactgcc atgggtaggt cttaatcata aaaacaagct ccattgtcat atccaggcaa 360
 gaaagatggc cactattctc acattgggan cagtgtataa gtgattcacc tttcctttct 420
 tgttggantc cttaccttca aanaaattcc acatatacat ttggaatgaa ctttggttg 480
 ttnccaagaa ntganttga aaattccaaa ctttggaac actttcttng aat 533

<210> 9175

<211> 456

<212> DNA

<213> Homo sapiens

<400> 9175

atattttcat ttttcatcct aatttactga agccattttc tttggttagc tttagaatta 60
 tctttcttta tactaaccag cttagcatgt aataattctt gcccatgtga ctacaaaaca 120
 ttagatatct ccacaaataa aaacganatt cacctacaca aatattcctt ctctttaagt 180
 tcacaaaatg caagaagaaa agaaaaatga tgtttaggtg tcagtaagga aagcatttct 240
 agatgagaaa aagaaactta agtggttattt cccccctaca gttttgaana cccggctgaa 300
 cacagcataa aaattgtcag gaacagtgcga ttctctttac antatgaagt gaactaaggg 360
 gttgggttgg ttcaattctg gcanccatt ccanaaaaaa aaccctcaa nttgacagt 420
 ccttttgtcc gtttangga tggcaacacc tntctcc 456

<210> 9176

<211> 382

<212> DNA

<213> Homo sapiens

<400> 9176

gagacttaac tggtttaatt gcttagccct ggtgcctcag ccacctctca tctgtagggt 60
 gagactcaag tccaggcacc aagacacacc agcaccacca acaccatgcg gggatcattg 120
 gcctgaaact tggccanaaa aagctccagt cctgggcctg taaaaatggg cgctgggant 180
 gtctgaagcc ggcacgggtg cccctgcgtt gtcggccctt gcaggtgaag tgtgtgtent 240
 tccccactt tccccgaat ggcaccacg gcctcctgct ggancctc cggggcccc 300
 ctcagggaac aaaactctgc ntntgttcaa ngttcaacct ggccacctgg aactccanct 360
 caccctgggg gtgtggatgg at 382

<210> 9177

<211> 473

<212> DNA

<213> Homo sapiens

<400> 9177

gaaaatttat ttcacattta ttactagtca cataatcctc aaaaatctaa gttcacaaat 60
 gatcatcaca tgnagccctc ttctccatat acacatttgt tagtgtgaaa aaacaatttt 120
 gtacagtatt ttagtagtta catgattagc aagcaacaga gaagtagtga aagctgaaga 180
 actccaaatg cattgctcat aggacaacca ctcaaacaca agcagctagg caataaagga 240
 aaatttccca tccagtcatt gagaaatgct aaaggcattt tatggtgaca tgaatgctta 300
 anttagtatg caacctatag ggcaaataaa actgctatat aggtnggtaa ttttgcatth 360
 aaatatttgt tagtatggta ctaccattt atctaacatt taataatata taaaatttta 420
 attctgggtt ctcaaaacan ttgcttggtta ttinggtana ntntctgtta tac 473

<210> 9178

<211> 354

<212> DNA

<213> Homo sapiens

<400> 9178

aatgacaaga attgcacagt ttattatttt gagacaattg ttgcagacat aaatatttaa 60
 aattttctaa gcaaggtgct ttttaacaaa tttttaaggt tggaaagagc tgataacttg 120
 gatcatagct cacacagaat tccaaattaa agtggactcc attatctccc tatattttgc 180
 aaacaatgct ttgtataaca cttcttttaa aactataaag agacagcaag ctgaaacttt 240
 tttcaaagca cacaagaaat gtttacttga aaaangtgct gaggggagaa gggagtgaaa 300
 aatcctttta ctatttccca ctacaggaca gccnctnnca gactangaac aagg 354

<210> 9179

<211> 242

<212> DNA

<213> Homo sapiens

<400> 9179

ctgtagcaat gaaaattttt aatttgaata aaaatcacgt aagcatgang ttgttgggga 60